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FIRST-YEAR WRITERS AND INTERMODALITY: A CASE STUDY OF EDUCATIONAL EXPERIENCES WITH MULTIMODAL COMPOSITION

by

MATTHEW SANSBURY

Under the Direction of Michael Harker, PhD

ABSTRACT

This case study investigates students' experiences with multimodal composition in our current technological moment; furthermore, this dissertation reaches beyond scholarly characterizations of multimodal composition, including the multimodality myth, by emphasizing student conceptions of composing, especially ones privileging both audio and visual modes of production. The multimodality myth spreads believable half-truths and presumptions about digital composition and multimodal composition more generally, creating impossible expectations for students and teachers alike, such as writers can choose to be multimodal, multimodality is all-digital or everything non-print, or multiliteracies are either print or digital but never both/and. To redirect the myth to more progressive ends, this project argues that writers are always already intermodal, incapable of switching off or mentally separating their multimodal means of communication and, building on that knowledge, posits that multimodal composition exceeds the digital and that multiliteracies, which directly inform the use of multimodal composition in the field, resist the print/digital binary. Paying close attention to theories

of crossover, transfer, and intercultural communication, this case study builds upon the arguments of Rhetoric and Composition scholars Ben McCorkle and Jason Palmeri, who model methods for remix as an analytical framework, as well as Jody Shipka, who argues that academic conversations about multimodality often exclude materiality.

This project demonstrates how theories underlying multimodal composition pedagogy and application depend on restricted views of the rhetorical situation more generally, one that is defined not by singular modes of production (audio or video) but by the interplay among the varied, uneven, and perpetually converging modalities that constitute intermodality. To support this theory of intermodal composition, this dissertation draws on findings from numerous focus groups comprised of first-year-composition students, personal interviews, multimodal writing samples, and multimodal literacy narratives. Over a period of three months, the participants, who were first-year students, described their experiences with writing, production, and communication more generally in the age of social media. These transcripts were analyzed to re-contextualize existing theories of composition and pedagogical conditions for our students in a fashion that reimagines what it means to participate, compose, and advocate with multimodality in the composition classroom.

INDEX WORDS: Intermodality, Intermodal composition, Multimodality, Multimodal composition, First-year composition, Multiliteracies

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MATTHEW SANSBURY

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Georgia State University

2019

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May 2019

DEDICATION

This dissertation is dedicated to the people who taught me to believe in myself and chase my dreams with abandon.

To Kevin Byrnes, taken from the world years before your time, thank you for being the best friend I have ever known.

To Tony Grieco, my sun and stars, you were there since the first day I chose this path and stood with me through it all: I am far too lucky.

To Dianne Yelverton, my mother, you believed in me before I was even born: thank you for loving me unconditionally.

To Reverend Donald Sansbury, my father, you taught me how to study language and distinguish myself as a gentleman: thank you, my friend.

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Finally, thank you to my students at Georgia State University who inspired me to be the best teacher-researcher I can be.

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PREFACE

The story of how I decided on the topic of this dissertation involves two specific courses at Georgia State University. It all began in "Sound, Language, and the Body," a special topics seminar I took in the summer of 2014 with Mary Hocks. During one of our lively discussions about sound, I asked, "what knowledge can we transfer from the study of visual rhetoric to aurality? Is there a commonality of expression that the various modalities share?" I knew by the look on Dr. Hocks' face that I had uncovered something special; she replied, "write down that idea!" This thought stayed with me for months as I navigated the various professional experiences that graduate studies provide, including class discussions and conference presentations. Eventually, I took "Composition Theory" with Michael Harker in the spring of 2015. After studying the New London Group's pedagogy of multiliteracies, I presented my idea to Dr. Harker, and he gave it a name, saying, "what you're talking about is intermodality."

Several months later, I began to assemble my committee for comprehensive exams and the inevitable dissertation project, and my ideas about intermodality kept growing. After spending hours researching the nature of intermodality, I discovered the concept being studied in Experimental Child Psychology and realized it applied to our field's conception of multimodal composition. By the time I started working on my prospectus, I had a working theory of intermodal composition and a set of issues I decided to call "the multimodality myth." I had noticed a tendency within academic conversations to discuss multimodality as a tool or skillset to be used at will even though the scholarship made clear that writers are always already multimodal; furthermore, I began to take issue with binaristic thinking and false dichotomies in Rhetoric,

Composition, and Literacy Studies, specifically multimodal/print in Rhetoric and Composition and digital/print in Literacy Studies. Because Rhetoric and Composition utilized the concept of multiliteracies for multimodal composition, it became clear to me that the field also inherited a mutated version of the literacy myth from Literacy Studies, and my project came into complete focus.

In terms of research methodology, I revisited some foundational conversations from Rhetoric and Composition and decided to create a throwback case study via associative historical remix by listening to students and studying their experiences with multimodal composition for evidence of intermodality. With intellectual curiosity in learning how, if at all, intermodality affects multimodal composition, I conducted a case study at Georgia State University with first-year writers, wherein I examined how students define and utilize theories of multimodality and how their usage characterizes intermodal composition; furthermore, I wanted to study whether the multimodality myth was observable in their experiences.

The following dissertation presents the results of this case study, introduces the concept of intermodal composition, and discusses the implications those results have for Rhetoric, Composition, and Literacy Studies. For instructors, this dissertation offers a new perspective for advancing the lessons of multimodal composition and addressing the communicative realities of our current technological moment. For administrators, this project provides a framework for the inclusion of intermodal composition in programs already familiar with multimodal composition and a means to address the multimodality myth in their pedagogies of multiliteracies. My hope is that this project will encourage teacher-researchers to resist broad paradigm shifts and stop participating in ideological debates that needlessly fracture the field.

1 INTERMODALITY AND THE LEGACIES OF MULTIMODAL COMPOSITION

Multimodality is a point of departure for several current debates within the fields of Rhetoric, Composition, and Literacy Studies. Organizing a study about students' experiences with multimodal composition is important because the term with its associated call to pedagogical action has hit critical mass within our discipline. Almost two decades have passed since Gunther Kress contributed "Multimodality" to *Multiliteracies: Literacy learning and the design of social futures*, an edited collection also featuring The New London Group's manifesto "A Pedagogy of Multiliteracies," "which focuses on modes of representation much broader than language alone. These differ according to culture and context, and have cognitive, cultural, and social effects" (64). As a response to "modes other than language [appearing] in the centre of the domain of public communication," Kress declared that "texts, textual objects are more clearly seen to be multimodal, that is, to be constituted by a number of modes of representation," calling for audiences "to rethink language' as a multimodal phenomenon" (180–181).

The tendency to separate modalities to study the senses independently (e.g. visual rhetoric or sonic literacy) is a helpful academic exercise; however, considering the fluidity and interconnectivity of modalities, like we do for the rhetorical appeals and canons, is also important for a more complete understanding of multimodal composition. Jonathan Alexander and Jacqueline Rhodes, in *On Multimodality: New Media in Composition Studies*, posit "that composition studies has found itself at a crossroads. In our steady incorporation of new media and multimedia forms of composing into our curricula and pedagogies, we have begun to meet the challenges of

expanded notions of authoring, composing, and literacy" (3). As early as 2007, Pamela Takayoshi and Cynthia L. Selfe, in *Multimodal Composition: Resources for Teachers*, indicate "that digital composing environments are challenging writing, writing instruction, and basic understandings of the different components of the rhetorical situation (writers, readers, texts) to change. Such changes are both significant and far reaching—and they promise to be disruptive for many teachers of English composition" because multimodal composing processes yield "texts that exceed the alphabetic and may include still and moving images, animations, color, words, music and sound" (1). Multimodality problematized composition pedagogy in myriad ways, especially the expectations of teacher-researchers to include new as well as print media in their work and to produce courses that engage students in digital as well as traditional print spaces.

For established professionals, doing so meant learning and incorporating entirely new theories and forms of composition, whereas for the next generation of teacher-researchers, doing so meant splitting graduate studies between composition's print traditions and its newfound digital identity. Lisa Ede, in *Situating Composition:*Composition Studies and the Politics of Location, argues that "scholars in composition enact progress by establishing 'killer' dichotomies that reduce complicated and situated scholarly projects to opposing 'camps' that we then either oppose or advocate" (187). She encourages readers to resist polarizing dichotomies and binary taxonomies (e.g. scholars/teachers) that yield reductive thinking.

The resulting "camps often circulate as decontextualized, commodified representations of pedagogical practice—and thus can be quite distant from the material practices involved in the teaching of writing" (44). Identity serves as a complex source of division within Rhetoric, Composition, and Literacy Studies because "those who view

themselves primarily as scholars and those who view themselves primarily as teachers are likely to have somewhat different professional identities and intellectual commitments" (120). For my own positionality, I refuse to prioritize one identity over the other; instead, I identify as a teacher-researcher like others in the field because my teaching informs my research, and my research informs my teaching.¹

Unfortunately, the digital disruption and resulting cacophony of scholarly voices continue into our current moment over ten years later. In "Thinking about Modality," Takayoshi and Selfe posit that "the texts that students have produced in response to composition assignments have remained essentially the same for the past 150 years. They consist primarily of words on a page, arranged into paragraphs" (1). Their point is nowhere more evident than in this print-based dissertation; however, by reframing our pedagogical situation using current theories of multimodality, we have changed our perspectives to conceive of traditional, alphabetic composition as having been always already multimodal (Kress 181; Palmeri 9). Jacques Derrida popularized, if not originated, the concept of "always already" as something that has operated and is operating in the world with no distinguishable origin; for example, Derrida's différance "designat[es] a passive difference always already in place as the ground of signification and an act of differing which produces the differences it presupposes" (Culler 46). Building on the field's multimodal heritage, this dissertation introduces intermodality as always already operative in multimodal composing practices.

¹

¹ See Hesse's "The Place of Creative Writing in Composition Studies"; Berthoff's "The Teacher as REsearcher"; Lunsford's (et al.) "Considering Research Methods in Composition and Rhetoric"; Kirsch and Mortensen's "Reflections on Methodology in Literacy Studies"; Ray's "Ethics and Representation in Teacher Research"; and MacLean and Mohr's *Teacher-Researchers at Work* for additional discussion of "teacher-researcher."

1.1 The Paradigm of First-Year Composition

A pendulum swings back and forth in Rhetoric and Composition: the paradigm shift. In "The Winds of Change: Thomas Kuhn and the Revolution in the Teaching of Writing," Maxine Hairston argues that paradigm "shifts are usually disorderly and often controversial, and the period in which they occur is apt to be marked by insecurity and conflict within the discipline" (77). Ede, in *Situating Composition*, argues for teacher-researchers "to consider the costs and dangers, as well as the benefits, of conventional disciplinary assumptions and practices . . . for instance, that we might do well to be suspicious of calls for broad paradigm shifts and of taxonomies that . . . can serve as much to police deviations from privileged narratives as to clarify differences in theory and practice" (30). All too often, a breakthrough in research or update in technology rallies teacher-researchers to swing toward one of two extreme positions in a resulting debate regarding who we are, who we serve, and what we study.

Hairston argues that "even with mounting evidence that their conceptual model doesn't work, supporters of the traditional paradigm resist change because they have an intellectual and sometimes emotional investment in the accepted view" (77); furthermore, paradigm shifts within the field employ overdetermined terms like rhetoric, literacy, technology, and composition, which bring their own complex legacies and multifaceted histories. Ede is "aware that for some, the word 'composition' holds connotations they wish to resist. Hence the adoption of such terms as 'rhetoric and composition,' 'composition studies,' and 'rhetoric and writing' as designators for the field" (31–32). Teacher-researchers who identify with one or more of these designated groups must wonder if composition, like rhetoric during the Enlightenment, has become an academic expletive in need of a modesty curtain. Ede employs the term "intentionally

evoking [its] problematic genealogy (which links it with traditions of schooled literacy instruction that many deplore) and its ambiguous, overdetermined status"; she purposefully does so in order to highlight the "tensions and contradictions inherent both to this term and to the field at large" (32). Ede also points to the Enlightenment as a source of intense scholarly critique of culture and education in general that stops short of recognizing "the way that these same notions circulate within academic ideologies of disciplinarity and professionalism" (187–188). Indeed, the paradigm pendulum swings as far back as the eighteenth and nineteenth centuries.

Even the history of the first-year-composition course in the United States represents the fruits of dichotomous thinking. Contemporary studies in Psychology, Literary Studies, Rhetoric and Composition, English Literature, and Communication—founded in or shaped by Scottish dissenting academies—are distinctive to Western culture, according to Lynée Lewis Gaillet and Winifred Bryan Horner in *Scottish Rhetoric and Its Influences* ("Preface" ix; "Introduction" 1). According to Horner's "The Roots of Modern Writing Instruction: Eighteenth- and Nineteenth-Century Britain," the compulsory composition course "is a peculiarly American institution not shared by modern British or European universities" (33); however, Horner posits that "composition, as it is taught today in North America, is not rooted in the ancient rhetorical precepts. Rather, the modern course is in fact a belletristic composition with deep roots in the Scottish 'New Rhetoric' of the 18th and 19th centuries" ("Introduction" 11). Despite the emergence of American textbooks during the mid-to-late nineteenth century, "Bain's *English Composition and Rhetoric* (1866) was the most widely used textbook in American college English" (Horner, "Introduction" 3).

In response to the country's first college literacy crisis, Harvard introduced the compulsory composition course as a stopgap measure in 1885: English A. Eventually, the course became a permanent feature of American education, and the field struggled to define itself amidst a paradigm shift: "It was not until Howell (1971) that interest in rhetoric was revived in departments of English. . . . As communication departments turned to political and interpersonal communication, and English literary scholars chose to ignore rhetoric, it was composition scholars in the 1970s who, in searching for methods to teach writing in their composition courses, turned to rhetoric" (Horner, "Introduction" 2). When one considers the origins of the Scottish-British and American-British divides in educational conceptualization, it is no wonder that Rhetoric and Composition suffers from killer dichotomies because the field sprang from a paradigm shift that situated rhetoric as either worthwhile or not. Perhaps it has become second nature for compositionists and rhetoricians to stake a claim in the latest territorial debate and defend that position at all costs; however, investigations of intermodality offer a fresh perspective for redrawing some of the ostensible borders between our disciplinary territories.

1.2 Defining Intermodality

By shifting our pedagogical focus to the margins between modalities, we can mitigate current debates and move the discussion away from the final products of multimodality to its processes for making meaning: intermodality, which I define as the interdependent cooperation of modalities. Intermodality is always already a supplemental component of multimodality, not in any way a replacement. For example, because we treat the sonic and visual as separate modalities, the study of audio-visual

rhetoric, which is inherently multimodal, necessitates an intermodal approach. "Audiovisual writing," according to Bump Halbritter in *Mics, Cameras, Symbolic Action:*Audio-Visual Rhetoric for Writing Teachers, "gives teachers and students a variety of options for multimodal learning" (14). To put it another way, multimodal composition is the software, and intermodality is its operating system. To make disciplinary inroads for the study of intermodality, I utilize various theories of multimodality to examine the writing processes of first-year-composition students; therefore, I offer this literature review to elucidate the pervasiveness of intermodality in everyday activities and the lack of conversations about it within the fields of Rhetoric, Composition, and Literacy Studies.

Interconnectivity is the fundamental nature of intermodality. I deliberately chose this term to describe this activity and not to use existing terminology such as sensorium or synesthesia for several reasons. Firstly, I do not want to unintentionally marginalize a disabled population by using the terminology of an actual disability even though the concept of synesthesia is closely related to intermodality. Secondly, intermodality, like this project, is based in psychology, whereas available terms are too sensorial or aesthetic to be operative in this study. Thirdly, "intermodality" looks, sounds, and behaves similarly to the already familiar "multimodality," and the prefix "inter" is key to the modalities' interconnectivity and fluidity. Intermodality is essentially interconnected multimodality, employing the mental process of constantly switching one's creative focus back and forth between overlapping modalities whether thinking, reading, writing, or editing. Finally, the term helps restrict the scope of this multidisciplinary project:

Sensory Studies and Disability Studies would be too much to treat effectively within one

case study alongside the necessary components from Rhetoric and Composition, Literacy Studies, Sound Studies, and Experimental Child Psychology.

Traditional metaphors for the writing process, like cooking or weaving, are useful in a general sense; however, intermodal transportation with its accompanying commerce is a better fit for the specifics of twenty-first-century writing, especially in the context of multimodal composition. In transportation, intermodality is a transport system that uses different modes of transfer in conjunction (e.g. sea, highway, rail, air). The writing process also becomes intermodal from this perspective because writers privilege or ignore certain modalities while shifting between invention, arrangement, style, memory, and delivery; in other words, "our bodily sensations are holistically integrated, even if our focus of meaning-making attentions in any particular moment might be one particular mode" (Cope and Kalantzis 179). In commerce, the term denotes that these different modes of transportation may carry a delivery without being unpacked at each stop on the route. Similarly, students and teacher-researchers do not stop at each step of the writing process to unpack all sensory information and each drafting strategy based on mental processes; however, visualization and emotional perception are inherent every step of the way.

Following a metaphor until it breaks down is already a time-honored practice in many language classrooms because the process encourages critical thinking and analysis. Consider the following metaphors and the various modalities they engage (all emphasis is my own):

- "picture" for verbally suggesting mental imagery (e.g. "picture it");
- "voice" for writerly persona in print artifacts;

- "sound mirror' for tape recorder, suggesting that it reflects an image of sound"
 (Truax 190; emphasis added);
- "playing by ear" for playing instruments without the ability to read music (i.e.
 Suzuki Method);
- "feeling" for understanding verbal meaning (e.g. "you feel me?");
- "listening" for "reading critically" or "paying attention"; and
- "thinking with the ears" (Adorno; Bull and Back).

Also, in "Voice in the Cultural Soundscape: Sonic Literacy in Composition Studies," Michelle Comstock and Mary E. Hocks use multisensory metaphors: students "are more apt to see composing as an iterative process that requires listening, getting feedback, revising, and starting over again"; and "like a fingerprint, each voice carries its own inflection, its own texture and grain" (emphasis added). That these metaphors already have made their way into our vernacular and academic discourse is evidence of intermodal processes.

Such metaphors work because modalities share a commonality of expression. Interrogating intermodal metaphors used in composition and communication, like the preceding examples, reveals shared principles among modalities: a kind of multisensory logic that we engage daily. Also, teacher-researchers in Rhetoric, Composition, and Literacy Studies can utilize the intermodal transportation and commerce metaphors for the writing process as well as a definition of intermodality from child psychologists: "the ability to perceive emotion information in a variety of modalities [that] develops early in life" (Zieber et al. 69). Doing so further reveals this expressive commonality among different modalities. While the origins of intermodality are psychological and material,

employing them as a metaphor for composition offers a glimpse at the nature of intermodality.

Intermodality is elusive because its operation within multimodal processes is nearly invisible. It works behind the scenes and across the margins via psychological, operational, and material means; however, meta-awareness (i.e. thinking about thinking) makes its study possible. While I situate intermodality this way to explore its nature, doing so forces a rhetorical structure on a dynamic, open system. This perspective is worthwhile for research and pedagogical purposes, but it represents one of many possible intermodal situations. I share these categories—psychological, operational, and material—in the spirit of other rhetors' work in the field like Donald C. "Stewart's five strands [of nineteenth-century rhetoric] or James Berlin's three systems of American rhetoric" (Gaillet, "The Nineteenth Century" 153). The categories of situated intermodality I offer also interconnect and overlap. Some characteristics of each intermodal category are attributable to others; however, for the sake of academic inquiry, I present them in such an order that transitions between sections purposefully mark commonalities.

1.2.1 Psychological Intermodality

Psychological intermodality involves the subconscious, cognitive process people engage constantly to shift their focus between competing sensorial stimuli to complete daily tasks. In Experimental Child Psychology, intermodality indicates an interaction between the various human senses (Zieber et al. 69). Kress asserts that "none of the senses ever operates in isolation from the others—other than in severe pathologies.

That, from the beginning, guarantees the multimodality of our semiotic world" (181).

Why do some people hum tunes or play music while working, and why do I wave my hands while giving directions over the phone? How do we concentrate in a noisy room? How can some pianists play by ear, and why do we refer to it as such? Why do we substitute the word "see" for "understand" in the vernacular? The answer is psychological intermodality because it exemplifies this subconscious, fluid switching of focus between modalities and their sensorial output.

The boundary between psychological and operational intermodality is dynamic. Subconscious functions of intermodality, which employ emotions and senses as a platform for other processes, belong to the psychological realm, whereas conscious usage of intermodal means, even mentally, characterizes the operational; furthermore, we can consciously use intermodal processes without knowing intermodality exists. For example, intermodality is inherent to the human condition because the senses are connected via mental pathways and interact through visual languages (Condit 104). Recently, in "The Sounds of Climate Change: Sonic Rhetoric in the Anthropocene, the Age of Human Impact," Comstock and Hocks remind us that "humans who are hearingimpaired experience a wide range of vibrational input through various senses and have never experienced—at least physically—absolute silence" (167). Steph Ceraso's "(Re)Educating the Senses: Multimodal Listening, Bodily Learning, and the Composition of Sonic Experiences" posits that "identifying the ear as the body part that enables listening does not capture all that is involved in experiencing a sonic event. Listening is a multisensory act" (102). Psychological and operational intermodality require multimodal listening and are also multisensory acts: all human beings receive sonic input, whether audible or vibrational, and are beholden to the soundscapes that are their everyday environments, and we use visualization to receive, interpret, regulate, and exchange the seemingly endless flood of multimodal, multisensory information. For example, a soundscape a la R. Murray Schafer is a sonic, rhetorical environment named in accord with its visual counterpart: a landscape.² By considering Schafer's naming convention as a transfer across modalities, I aim to help readers understand that comparing an aural soundscape to a visual landscape using alphabetic text and spatial representation (i.e. -scape suffix) is an intermodal activity.

1.2.2 Operational Intermodality

Operational intermodality represents the conscious usage of interconnected modalities for interpreting and making meaning. When a writer crafts an essay, she may listen to music or play videos in the background; inevitably, these multisensory heuristics affect the work throughout parts of the process even if their effects are not apparent in the final product. Conversely, another writer might prefer the noise of a busy coffee shop or park for his essay; however, he will need to tune out parts of the soundscape at times to focus. This ability to shift our communicative focus back and forth employs psychological and operational intermodality.

Composition is an effective example of operational intermodality. In fact,

Kathleen Blake Yancey's "Made Not Only in Words: Composition in a New Key" can
serve as a model for characterizing operational intermodality with greater specificity
within the field's traditional discourse; however, it is important to note that the final
product represents material intermodality. Yancey employs intermodal composition by
crafting sections of her talk in quartets: each one situates the text within a different

² See Schafer's *The Soundscape: Our Sonic Environment and the Tuning of the World* for a complete definition of the soundscape.

moment. Similarly, in *Remixing Composition: A History of Multimodal Writing Pedagogy*, Jason Palmeri utilizes subheadings that introduce tracks within his associative remix of composition's multimodal history. Originally addressing CCCC 2004 attendees in San Antonio, Yancey says "[w]e have a moment. . . . These moments: they aren't all alike, nor are they equal. And how we value them is in part a function of how we understand them, how we connect them to other moments, how we anticipate the moments to come. For compositionists . . . this moment *right now*—is like no other" (267). Her talk-turned-publication exemplifies composing intermodally among the margins (sonic, alphabetic, and personal modalities); in this case, the talk is theoretically as much music as it is text.

Music achieves resonance or dissonance by playing with the audience's expectations and interactions. Peter Elbow, in "The Music of Form: Rethinking Organization in Writing, posits "spoken words are just like music: they exist in time, and we take them in by ear. Written texts may be laid out in simultaneous space, but good writers tend to heed . . . the fact that readers have an experience that is more temporal than spatial" (625). According to Elbow, great compositions should certainly organize the various parts spatially but should also take readers on a journey much like music does, leading audiences "to satisfaction by way of expectations, frustrations, half satisfactions, and temporary satisfactions: a well-planned sequence of yearnings and reliefs, itches and scratches" (626). Contemporary writers should take a note from musicians and intermodal compositionists like Yancey and Palmeri.

These rhetors' pages are silent, but the idea of music within alphabetic text becomes embodied in the audience members' personal conception of the work. This personal modality, which Bill Cope and Mary Kalantzis call "one's mind's eye" in

"Multiliteracies': New Literacies, New Learning," is the latest addition to The New London Group's pedagogy of multiliteracies (179); in this sense, authors always already employ operational intermodality to capture moments of critical thinking as they research, invent, and initially draft a text of any sort, just as published conference proceedings like Yancey's employ material intermodality to capture and remediate sonic, temporal meaning in alphabetic, print spaces.

1.2.3 Material Intermodality

If operational intermodality represents conscious processes, then material intermodality involves the resulting products and their media or carriers; for example, when we refer to multimodal composition as a product, we are describing material intermodality. Cope and Kalantzis argue that meaning made in any given modality "cannot be directly and completely translated into another" because the modalities "are fundamentally different ways of knowing and learning the world" (180); although complete transfer is admittedly impossible as they suggest, intermodality offers a way to explore what commonalities do exist between modalities however small their measurement: "Gestures may come with sound; images and text sit side by side on pages; architectural spaces are labelled with written signs. Much of our everyday representational experience is intrinsically multimodal" (179). Machines, screens, and nonorganic things employ material intermodality for the movement of messages across modalities in media and the shipment of packages around the world. Ships, trucks, trains, and planes, for example, are intermodal in a material sense because they work in conjunction across boundaries to ship goods; furthermore, companies physically mark these carriers with the term "intermodal" to indicate their participation in this system. A carrier is intermodal because it switches between modalities without unpacking its contents at every stop along the way; material intermodality defies standard boundaries.

Sound is an effective example of material intermodality due to its multisensory nature and pervasiveness. Comstock and Hocks write, "the difficulty of representing sound as rhetorical material (like the printed page) or as a rhetorical event (like a public speech) may relate more generally to its multisensory pervasiveness—a pervasiveness that goes beyond what we might reductively call the act of hearing or auditory processing" (167). The study of intermodality advances aurality to a position of equal importance as its multimodal counterparts. Like Selfe, Hocks, Comstock, and other contemporary teacher-researchers, I seek to "rediscover aurality as a valuable modality of expression" (Selfe 619). The effects sonic literacies have on the writing process are often invisible; however, primary research for this case study suggests that sound plays an integral role within some writers' processes for composing traditional, alphabetic texts.

1.3 Enlightenment Intermodality

While my research focus is intermodality in the composing practices and everyday experiences of first-year writers, intermodal composition, as this section endeavors to illuminate, has always already been operative within rhetorical discourse. During the Enlightenment, the advent of print culture eclipsed the previous paradigm much like digital culture has in our current moment; therefore, to answer multiple historic calls to avoid becoming a prisoner of the past, I revisit this period with a different approach to provide a better understanding of intermodal analysis (Graff, "Literacies, Myths, and Legacies" 12).

Historians, compositionists, and rhetoricians have "characterized the nineteenth century as a stagnant era of imitation, or dismissed the period as vacuous" (Gaillet, "The Nineteenth Century" 152); however, this characterization suffers from reductive thinking in the humanities in general as well as Rhetoric and Composition in particular. In The Present State of Scholarship in the History of Rhetoric: A Twenty-First Century Guide, Gaillet updates Stewart's argument "that nineteenth-century rhetoric takes on shape and form when viewed in terms of the classical canon—invention, arrangement, style, memory, and delivery" and his delineation of "the following 'strands' of nineteenth-century rhetoric: classical, elocutionary, psychological-epistemological, belletristic, and practical (composition)" (152). Sharon Crowley's "The Evolution of Invention in Current-Traditional Rhetoric: 1850–1970" exemplifies Stewart's position because it traces invention as a canon of rhetoric and its moves for just over a century, giving us language to discuss invention's transformation since antiquity; however, Gaillet indicates "that we are still standing in the stream when it comes to redefining and reinterpreting the period's traditional history; recent scholarship addressing the nineteenth century no longer neatly fits into Stewart's five strands or James Berlin's three systems of American rhetoric" (153). Teacher-researchers continue to recodify rhetorical notions from the nineteenth century "to take into account the explosion of divergent scholarship spanning the last twenty years" (154). Indubitably, teacherresearchers in Rhetoric and Composition are still quite busy reclaiming rhetorics from the not-so-vacuous eighteenth and nineteenth centuries, and intermodality offers new methods for the process.

With the assistance of print culture and literary societies, Enlightenment rhetors popularized eloquence and belletrism via rhetorical theories, affording for the

advancement of elitist strategies that situate taste as societal ethos. Ben McCorkle's "Harbingers of the Printed Page: Nineteenth-Century Theories of Delivery as Remediation" explores the belletristic and elocutionary movements as sites of remediation, the double logic illustrated by "our culture's contradictory imperatives for immediacy and hypermediacy" (Bolter and Grusin 5); in other words, we multiply our new media while inevitably erasing old media in this dual act of multiplication and pseudo-invisible mediation.

McCorkle's study of technology and rhetoric ostensibly situates his work into what Ede would call a camp within the field: new media studies; however, remixing history using new media theory is an example of resistance to dichotomous thinking in the discipline because it employs contemporary theory as a lens for the historiography of print culture. Writers frequently depict these movements as conflicting with each other; however, McCorkle considers how belletrism and elocution complemented one another to bring about the phenomenon of naturalizing and remediating print culture as the standard for all discourse (25–26). Ultimately, his study revisits the rhetorical tradition to reconnect it to its technologies of delivery.

In the early-nineteenth century, Richard Whately posits that "printing, by extending the sphere of operation of the writer, has of course contributed to the extension of those terms which, in their primary signification, had reference to speaking alone" (qtd. in "Harbingers of the Printed Page" 25). This period marks the naturalization of print literacy: "in the theoretical footsteps of Hugh Blair, Whately's treatise greatly expands the domain of rhetoric to include all written and spoken communication by directly stating that the belletristic movement was the outcome of a vibrant, growing print culture" (25). Writing became a way to compose and record

speeches textually, and speaking became a way to deliver tasteful writing vocally; print the new medium of the day—mediated both processes, ultimately becoming the standard for all discourse. McCorkle's Rhetorical Delivery as Technological Discourse: A Cross-Historical Study opens the discussion about the redefinition of delivery as being "at the center of our ongoing efforts to make sense of the strange new world of new media texts" (xii). McCorkle's book is "a project of historical recovery through reinterpretation, one that examines various historical 'case studies' throughout the Western rhetorical tradition, offering at each moment an analysis of rhetorical delivery as a site wherein given technologies of writing and communication (chirography, print, television, hypertext) enter the cultural sphere" (3). Rhetorical theory in the Western tradition changed drastically between the seventeenth and nineteenth century, shifting overall to utilize natural logic in place of formal logic as exemplified by Enlightenment reason and vernacular dissemination (e.g. essays in French and lectures in English). There were countless variables that brought about many changes, but shifts in thinking about science and philosophy-especially human nature and language-contributed overwhelmingly to the new rhetoric, which was a product of this era's new sciences and philosophies.

Faculty psychology, one of the Enlightenment's new sciences, provides an illustration of the shifts in Western rhetorical theory as well as evidence of intermodality. Writing in the shadow of the late-sixteenth century's anti-rhetoric movement, John Locke inherited audiences with a distaste for rhetoric and an appreciation for logic and the new science. *An Essay Concerning Human Understanding* treats the psychological, epistemological ramifications of human understanding as a quality and faculty of the mind. Theorizing how we know what we

know enables Locke to explore how to communicate what we know effectively via language. He posits "[t]he chief end of language in communication being to be understood, words serve not well for that end, neither in civil nor philosophical discourse, when any word does not excite in the hearer the same idea which it stands for in the mind of the speaker" (817). Aware of the intertextual connection between speakers and audiences, Locke addresses alphabetic and sonic modalities in terms of visualization. Through the lens of intermodality, we can begin to explore Locke's alphabetic-sonic-personal work as a process instead of merely a product.

Representing the full spectrum of multimodal composition, Gilbert Austin's Chironomia was innovative in its rhetorical consideration of the gestural, alphabetic, visual, sonic, spatial, and personal modalities. He seeks to convey "to the reader a tolerably accurate knowledge of the manner of using the notation" for elocution or spoken performance (890). Remediating orality via print culture for his readership, Austin presents alphabetic notation as well as illustrations of hand gestures and the body in space and time to systematize nonverbal communication for elocution. He applies this system to John Gay's "The Miser and Plutus" as an example; furthermore, there is a discussion of specific notation in terms of hand and arm placement. Austin's text is an ideal source of Enlightenment intermodality: alphabetic (printed delivery and his notation); sonic (voice and spoken delivery); personal (emotion expressed in "Preface" and "Introduction"); as well as visual, gestural, spatial, and temporal (illustration and organization). This piece covers all the modalities typically discussed in conversations about multimodal composition, but without considering how these modalities interact temporally, it would be impossible to apply his theory into practice. Austin's work captures the essence of intermodal meaning as it applies to elocution

because the text notes a need for marking the printed margins in order to yield a more eloquent delivery of the voice and body at the appropriate moments (892). The interplay of these communicative modalities is essential to the meaning they make. Taking this long view of history to understand the remediation of orality and print culture is important because remediated print artifacts are making their way into online environments and other non-print, rhetorical situations through intermodal processes.

1.4 Visualization as Intermodal Platform

In our own historical and pedagogical moments, rhetorical theory is changing based on new sciences and technologies: teacher-researchers in Rhetoric and Composition, like McCorkle and Palmeri, have employed remix as method as well as remediation or multimodality as theoretical lenses to revisit the field's history. We can make a similar move toward the discursive history of multimodal composition by borrowing the lens of intermodality from Experimental Child Psychology. In "The development of intermodal emotion perception from bodies and voices," Nicole Zieber and other psychologists suggest "that intermodal matching indicates a level of knowledge about affect that goes beyond simple discrimination of modality-specific features and indicates a sensitivity to common affective information in expressions from different modalities such as faces, voices, and bodies" (69). For these psychologists, the personal modality (i.e. the realm of visualization and emotion: "one's mind's eye") provides an intermodal platform that interconnects the sonic, visual, gestural, spatial, and alphabetic because intermodality denotes an interaction between different senses (Cope and Kalantzis 179). The interplay of multiple modalities is paramount to the

meaning they make because the brain's pathways are interconnected and do not interpret multisensory information separately (Condit 104).

Because modalities overlap and intersect in complicated ways, the process of design affords students an opportunity to explore intermodality; for instance, sonic, visual, and alphabetic pieces share common threads in terms of invention and arrangement. Organizing a documentary film is comparable to arranging a podcast in the same way that revising an alphabetic essay is like remixing a song or album. Documentaries and podcasts require multimodal composition for storyboards, outlines, and scripts as well as specialized equipment, staff, and outside participants. Comparing the composition of an eighteenth-century gesture manual to a Youtube video helps the user better understand both, and interior design is an effective metaphor for revision because the comparison encourages audiences to visualize how each situation relates to the next: Hocks, in "Understanding Visual Rhetoric in Digital Writing Environments," argues that "[b]ecause the process of design is fundamentally visual and multimodal, it can be challenging, but it leads students to a new understanding of how designed spaces and artifacts impact audiences" (652). In the following chapters, I will share and analyze primary sources from this study, which provide evidence for these examples.

To employ an ecological metaphor, intermodality characterizes the relationship of sonic, visual, alphabetic, gestural, spatial, and personal meaning as open systems that are susceptible to and informed by one another. David Barton, in *Literacy: An Introduction to the Ecology of Written Language*, states that "ecology is the study of the interrelationship of an organism and its environment. When applied to humans, it is the interrelationship of an area of human activity and its environment. It is concerned with how the activity – literacy in this case – is part of the environment and at the same time

influences and is influenced by the environment" (29). Many current conceptions of multimodal composition represent a closed system, which does not exchange any matter with its surroundings (i.e. the sonic as separate from and uninfluenced by the visual). For example, the study of visual rhetoric often seemingly happens in a vacuum and rarely takes other modalities into account, even though spatiality is a major contributor to meaning made in visual media. In "What Else Is Possible': Multimodal Composing and Genre in the Teaching of Writing," the editors of *Multimodal Literacies and Emerging Genres* Tracey Bowen and Carl Whithaus recognize the interconnection between modalities: "Our definition of 'multimodal composing' within the context of these chapters, however, is that it involves the conscious manipulation of the interaction among various sensory experiences—visual, textual, verbal, tactile, and aural—used in the processes of producing and reading texts" (7); that interaction between modalities is the essence of intermodal communication.

This ecological, metaphorical understanding is also the reason I chose intermodality in lieu of intramodality because the inter- prefix refers to open systems among multiple groups, whereas the intra- prefix treats closed systems within a single group. This perspective is important because it represents the rhetorical possibilities of multimodal composition, which involve intricate, overlapping modalities that are not separate in the mind's eye (i.e. visualization); in fact, the metaphor of visualization is an effective illustration for introducing intermodality to Rhetoric, Composition, and Literacy Studies.

Visualization and intermodality connect closely to the notion of personal representation in Cope and Kalantzis's contemporary pedagogy of multiliteracies:

"Representation to oneself may take the form of feelings and emotions or rehearing

action sequences in one's mind's eye" (179). In Reengaging the Prospects of Rhetoric:

Current Conversations and Contemporary Challenges, Communication scholar Celeste

Michelle Condit indicates that

[c]urrent studies of the mind 'talk' to us in visual languages that interface many kinds of discourses. These show that . . . there are dozens of semi-specialized functional centers in human brains, which are interconnected by dense networks of neurons, and the brain's processes involve multiple passes through the multiple circuits that connect these different specialized centers. (104)

For example, petitioning students to imagine or visualize is inherently a multisensory, intermodal request because they must utilize the personal modality, the mind's eye, as a platform to craft a mental storyboard, which transfers concepts from the visual and spatial modalities (Cope and Kalantzis 179); furthermore, terminology like "imagine" and "visualize" denotes active mental processes through the verbalization of root words: "image" and "visual." Handwritten lyrics and musical notation also speak to the mind in visual languages while it interfaces other modalities; in fact, many sonic, visual, gestural, spatial, and personal compositions begin as alphabetic writing on paper or word-processing software (e.g. outlining or brainstorming) before extensive acts of remediation.

Similar to Bolter and Grusin's *Remediation*, Henry Jenkins' *Convergence Culture* defines convergence as "the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want" (2). The concepts of remediation and convergence are useful to

studies in multimodal composition, but they do not explicitly address multimodality as a counterpart; however, intermodality does so precisely. Teacher-researchers in the fields of Rhetoric, Composition, and Literacy Studies can connect with these audiences of convergence culture via multisensory metaphors, especially students of pedagogies of multiliteracies, by framing such media as products of multimodality via intermodal processes. For example, mixtapes, burned CDs, and digital playlists, which are primarily sonic media but also multimodal compositions, are effective examples of material intermodality.

1.5 Consequences of Multiliteracies: The Multimodality Myth

Because Rhetoric and Composition adopted pedagogies of multiliteracies³ for multimodal composition, it is a suitable discipline for researching the consequences of multiliteracies. Kate Vieira, in "On the Social Consequences of Literacy," asks, "[w]hat are the consequences of literacy? I would like to know the answer. And I believe Composition Studies is an ideal disciplinary space from which to approach it." She writes that our subject matter is different, allowing a shift in analysis from culture to writing specifically: "how it happens, what it means, where it circulates, how it accomplishes its goals, whom it advances, whom it leaves behind, what it is worth and why. These processes entail the social, but do not require us to pin it down and watch it wriggle. Our attention can be more centrally trained on literacy" (26). Gail E. Hawisher and Selfe, in "Studying Literacy in Digital Contexts: Computers and Composition Studies," claim that "digital environments are so ubiquitous as communication spaces in our world that they are, arguably, an integral part of composition studies" (188). Despite

³ See the New London Group's "A Pedagogy of Multiliteracies: Designing Social Futures."

these positions and decades-old calls to pay attention to technology, there are several camps that continue to resist or woefully tolerate the explosion of digital culture in our writing lives and literate practices (Selfe, *Technology and Literacy in the Twenty-First Century* 11; Selber 6). Selfe also discusses the disruptive nature of "our cultural tendency to sketch complex technology issues and the technology-literacy link along the lines of a reductive binary—technology as a boon or technology as a bane" (39). Dichotomous thinking and its reductive binaries abound in conversations about multimodal composition and multiliteracies. "Studying almost any aspect of rhetoric and composition," Hawisher and Selfe warn, "without acknowledging the significant roles that digital environments play as people make meaning in their homes, in schools, in communities is, in sum, to [make invisible] the realities of contemporary communication" (188). Their admonition especially applies to teacher-researchers working at the intersections of Rhetoric, Composition, and Literacy Studies.

Currently, we are standing in an unstoppable deluge of new media where print and digital cultures overlap in complicated ways. The Enlightenment rhetors must have felt something similar during the advent of print culture. Elizabeth L. Eisenstein, in *The Printing Press as an Agent of Change*, discusses Marshall McLuhan's *The Gutenberg Galaxy*, indicating he "attributes his own awareness of and ability to withstand the quasi-hypnotic power of print to the advent of new audio-visual and electronic media." The print paradigm with its standardized format and line-by-line conditioning, according to Eisenstein and McLuhan, has rendered itself invisible over time: "By affecting our sense and conditioning our perception differently, [McLuhan] holds the new media have begun to break the bookish spell that held literate members of Western society in thrall during the past five centuries" (16). Digital spaces, especially social

media, have transformed the composing processes and literate practices of twenty-first-century students, and they bring established writing concepts and experiences into compulsory composition classes. Over the last six years, my students have produced memes, photo remixes, comics, digital stories, infographics, blogs, eportfolios, music, podcasts, videos, and remixed mashups in response to composition assignments. First-year composers already conceive of writing as much more than words on paper, and so should we as the educators overseeing their composition instruction.

Since 1996, widespread adoption of The New London Group's pedagogy of multiliteracies and Kress' semiotics for the teaching of multimodal composition have solidified another set of opposing camps: print/digital (Cope and Kalantzis 167; Takayoshi and Selfe 2–3; Ede 187). Consequently, Rhetoric and Composition inherited "the legacies of literacy" along with this groundbreaking pedagogy. According to Harvey J. Graff, a significant portion of "the legacies of literacy" involves the rhetorics of "crisis" and "decline" as well as "the pervasive powers of deeply rooted and widely shared assumptions and presumptions about literacy" (16). The field's deployment of pedagogies of multiliteracies has yielded far reaching effects on first-year-composition courses and Rhetoric-and-Composition programs featuring multimodality, effectively extending the literacy myth to multimodal composition, that "literacy's powers [are] universal, independent, and determinative" (5). Many current conversations about multimodal composition similarly contain assumptions and presumptions about multiliteracies: the multimodality myth.

This multimodal extension of the literacy myth does not blatantly express falsehood, but it certainly spreads believable half-truths about multimodal composing practices and reveals ideology that makes the myth possible. Technology, writing, and

rhetoric have influenced one another since Plato and Aristotle's ancient treatments of technê, so it is beyond time to interrogate our habits of mind for evidence of sociocultural myths about technology, such as "technology is transparent" and "technology is all-powerful," that inspire and reify killer dichotomies within the field (Haas 33); furthermore, examining the multimodality myth alongside prevalent technological myths elucidates their shared ideology. Christina Haas, in Writing Technology: Studies on the Materiality of Literacy, indicates "these myths . . . are really two sides of the instrumentalist view of technology [that] contribute to a division of labor in which scholars in the humanities and many of the social sciences believe that 'technology is not our job,' whereas scholars in other, more technical domains believe that 'technology is our *only* job'" (22). She warns that when unchecked these myths position people "to be merely receivers or consumers," removing them entirely from the development, critique, and inquiry of technology; such myths "are particularly insidious because they lurk, unexamined, in thinking about and definitions of technology and they color both how problems of technology are delineated and what strategies are brought to bear in their solution" (33). The multimodality myth similarly encourages a deterministic view of technology as transparent because it features unrealistic expectations about cognition, writing technologies, digital composing, and the nature of literacy, producing "an overly positive, whole-hearted acceptance of computer technology without any consideration of possible negative effects of that technology" (22).

Much like the literacy myth, the multimodality myth disseminates unrealistic presumptions regarding digital composition and unreasonable expectations of Rhetoric, Composition, and Literacy Studies to produce students with such qualities: 1) writers

can switch off/on multimodality; 2) multimodal composition is synonymous with digital composition; and 3) multiliteracies are either print or digital. An understanding of situated intermodality (i.e. taxonomy of psychological, operational, and material) counteracts the multimodality myth, providing a way to break its spell on enthralled teacher-researchers. Compulsory composition courses featuring multimodal pedagogy often introduce projects as if students will turn on their multimodal selves for the first time instead of teaching them theories of multimodality as evidence that they have always already been multimodal composers. Educators new to the topic tend to frame multimodal composition as entirely digital, choosing to focus on social media and online environments with no discussion regarding materiality; furthermore, academic conversations about literacy frequently divide the topic into print or digital spaces, rarely treating the materiality or hybridity of literate practices. Dropping multimodality within existent pedagogies without proper treatment is as ineffective as the same approach to literacy instruction.

Literacy is a complicated endeavor, and the entire topic becomes more problematic the moment the conversation includes digital culture (Keller 1). Michael Harker's *The Lure of Literacy: A Critical Reception of the Compulsory Composition Debate* challenges "teacher-researchers who presume that the topic of literacy is 'well-traveled' ground in rhetoric and composition scholarship. If this is the case, [he argues] that it is perhaps the most compelling reason for renewed interest in literacy studies, specifically the ways in which the literacy myth intersects with the day-to-day work of teaching composition" (4–5). Harker also discusses abolitionist/reformist publications as using terms and rhetoric that are divisive (65)—which exemplify Ede's camps. He specifies that "[w]hat we find luring . . . readers . . . into the debate are exaggerated

expectations about the consequences of possessing a particular type of literacy, as well as the unreasonable expectations of composition to consistently deliver these qualities and characteristics in students" (110). The multimodality myth is part of this legacy, luring audiences into the ongoing debate. Lures and legacies of literacy comprise the literacy myth, so the ideological trap is also set for studies in multimodal composition and pedagogies of multiliteracies. "Technology myths," writes Stuart Selber in *Multiliteracies for a Digital Age*, "however, are not the only obstacles to more fruitful literacy practices in a digital age. There are, in addition to these discursive forces, a whole host of pedagogical and institutional impediments that must be dealt with" (6). Interrogating our pedagogical habits is crucial to addressing such impediments and resisting these pervasive cultural myths, and the composition classroom is fertile ground for such work.

Just as Composition Studies benefitted from making rhetoric its own in the late twentieth century, it follows that Rhetoric and Composition benefits from multidisciplinary interactions with Literacy Studies as Vieira and Hawisher and Selfe express. "Literacy is a term almost as slippery as rhetoric," writes Krista Ratcliffe in The Present State of Scholarship in the History of Rhetoric. She states that within "popular usage, literacy signifies the ability to read, but, in actuality, it encompasses all the rhetorical arts of reading, writing, speaking, and listening. Even more, literacy entails knowing how and when to employ these arts so as to navigate social and cultural systems, whether these systems be schools, workplaces, social networks, or bus routes" (193–194). Pedagogies of multiliteracies exacerbate these matters with the introduction of multimodality in material, digital, and hybrid environments. Ratcliffe indicates that a number of "traditional scholars worry that a focus on literacy ignores rhetoric as subject

matter and reduces it to an unspoken/untheorized method for analyzing ethnographic data. . . . But again, in the best scholarly intersections of rhetoric and literacy studies, these fears prove groundless" (194); however, much like composition's own overdetermined status as scholarly terminology, literacy brings its own histories, myths, and enticements.

People make assumptions about literacy as they encounter it in everyday life, and how they use literacy depends on their own definitions, communities, histories, and situations. The most common societal views of literacy originate in the educational systems; therefore, school-based definitions become society's dominant understanding (D. Barton 2). For example, teacher-researchers often employ a skills-based conception of literacy in Rhetoric and Composition (12). While such a concept can be helpful in some contexts, it can serve as a limitation when conception replaces definition altogether.

This study of intermodality within multimodal composing practices and pedagogies of multiliteracies requires a multidisciplinary understanding of inherent myths as well as the limits of literacy, and the New Literacy Studies offers a way to progress on that front. Deborah Brandt's award-winning study *Literacy in American Lives* calls attention to literacy sponsorship, saying "the sponsors of literacy [are] those agents who support or discourage literacy learning and development as ulterior motives in their own struggles for economic or political gain" (26). This concept serves as the organizing framework for her research because it is the platform for inquiries into the daily literate practices of eighty Americans during the twentieth century. As a literacy sponsor myself, I am aware that there are ramifications of such sponsorship, extending to this very text. Brandt and Katie Clinton, in "Limits of the Local: Expanding

Perspectives on Literacy as a Social Practice," treat literacy as participant of local practices and those practices as a system of sponsorship, saying, "the new paradigm maintains its own, tacit great divide – one that assumes separations between the local and the global, agency and social structure, and literacy and its technology" (338); this new way of thinking that grew from the field's reaction to great-divide conceptions has seemingly yielded newer divisions, including between literacy and its technology (i.e. print/digital).

This great-divide between literacy and its technology and between the local and the global in Literacy Studies is similar to the print/digital dichotomy in Rhetoric and Composition because teacher-researchers in both fields frequently treat writing as solely print or multimodal composing practices, which are inherently intermodal and often material, as solely digital. Furthermore, many literate practices represent intermodal processes intimately connected to Rhetoric and Composition, which "has always already been a field that has sought to help students draw connections between writing, image making, speaking, and listening" (Palmeri 10). Selfe and Hawisher "have always begun with the understanding that we could not hope to understand any literacy or language use—print or digital—until we understood the complex social and cultural ecology, both local and global, within which literacy practices and values are situated" (188). Literacy is not print or digital; it is print and digital, local and global. By applying Brandt and Clinton's understanding to this project and its research, intermodality becomes a microcosmic representation of multimodality: the local as comprising part of the global. For example, when students compose intermodally, they are keenly focused on the process as well as the product of their multimodal means of persuasion, allowing for transfer among seemingly separate modalities; furthermore, students frequently

remediate print artifacts such as outlines and storyboards (local) into digital spaces (global). From this perspective, facets of the local become emblematic of and interconnected with the global.

Understanding its limits does not mean we must reject the local; instead, we must find and make connections between the local and global, "agency and social structure, and literacy and its technology" (338). Graff's "Literacies, Myths, and Legacies" warns that "[f]ailure to appreciate the provenance of the past, of history, in the present and the possibilities for the future makes us its prisoners, bound to repeat the past, rather than to learn from it and to break its bonds" (12). He characterizes literacy "as one among a number of communication media and technologies" to combat the myth "that literacy's powers [are] universal, independent, and determinative" (5). Brian Street, in "What's 'new' in New Literacy Studies?," advises that teacher-researchers "need to analyze and contest what counts as 'literacy' (and numeracy); what literacy events and practices mean to users in different cultural and social contexts . . . but also what are the 'limits of the local'" (87–88). Literacy as an operative term, like composition or rhetoric, suffers from an identity crisis that continues to cause academic disagreements about its worth.

Prioritizing print literacy or writing over reading is another example of the interplay among public conceptions of literacy; however, these conversations spill over into scholarly communities as well: "The approach we are seeking requires a broadly based literacy that connects critical thinking with the skills of critical reading and writing in politics, economics, and social relations as well as in a larger cultural sphere, a literacy no longer limited to alphabetic abilities and to a historical basis that is static and acculturative" (Graff 29). Much like Graff takes issue with cultural literacy and the like,

we must stop limiting literacy spatially and stop thinking of literate practices as only print or digital and local or global to recognize that literacy—like composition or rhetoric—is always already hybrid, multimodal, and intermodal.

1.6 Both/And: "A [Situated] Composition Made Whole"

Resisting the hegemony of the print paradigm entirely has resulted in a parallel situation with the digital, exacerbating the multimodality myth: ignoring materiality altogether in multimodal composition; this study does not seek to prioritize digital culture or one modality over another. In fact, one of the core outcomes is recognition of the interconnected transfer between modalities. Jody Shipka, in *Toward a Composition Made Whole*, argues "how a tendency to label as multimodal certain texts or artifacts, whether they are digitally based or comprised of a mix of analog components, works to facilitate a text-dependent or textually overdetermined conception of multimodality, thereby limiting potentials for considering the scope, complexity, and pervasiveness of multimodal practice" (12). Also, I agree with Ede that "it seems particularly important that I acknowledge my own situatedness in the work of composition, and the ways this situatedness influences my perspective" (21). By employing Ede and Shipka's work as theoretical lenses in one pair of glasses, we may look to a future in which we study a situated composition made whole: a field in which we respect our multifaceted, complex histories and embrace multidisciplinarity.

A situated composition made whole knows where it has been, but more importantly, it knows where it is going. Shipka's discussion of literacy and learning practices as fundamentally multimodal is in line with Palmeri's related claim about writing pedagogy as always already multimodal in (52; 21); furthermore, both authors

treat dichotomies common to scholarship in Rhetoric, Composition, and Literacy Studies. Similarly, interesting connections exist between Shipka's argument about the digital/material split in multimodal studies and Ede's position that killer dichotomies force teacher-researchers into opposing camps.

Offering a method to move beyond these camps, McCorkle explodes the print/digital dichotomy by remixing the history of print culture using theories from new media studies; like Harker's reasoning for revisiting the lure of literacy, McCorkle's "impulse is to look back at the technological terrain we have long since traversed" (xii). Palmeri's *Remixing Composition* similarly revisits the composition tradition via associative remix "to resist the limiting effects of both binary taxonomies and linear progress narratives" (16). The book re-imagines the process movement in particular, explores composition pedagogy as an auditory art (i.e. reduced listening or objectified aurality), revisits the initial multimedia explosion within the field, and makes connections to the resulting studies in visual and digital rhetoric. Ultimately, in these works McCorkle offers a method of historical remix to reconnect Rhetoric to its technologies, and Palmeri offers a similar method of associative remix to reconnect Composition to its history of multimodal writing pedagogy. This case study makes similar moves to remix the history of multimodality to connect Rhetoric, Composition, and Literacy Studies to the concept of intermodality.

Remix affords an opportunity to move the field away from reductive thinking and contentious debates that result in opposing camps or separate disciplines altogether.

Palmeri's argument productively informs discussions about the future of composition in higher education, which is why it is central to this study on multimodal composition and

intermodality: "compositionists have a rich multimodal heritage that we can build upon in order to reimagine contemporary pedagogical practices" (149).

Teacher-researchers need not label themselves only as scholar or teacher. Students of composition need not choose between rhetoric or literacy as their primary purview. Literacy does not have to be either print or digital. To employ a concept from Kenneth Burke's rhetoric, we can conceive of these ostensible opposites as both/and instead of either/or; Richard M. Coe, in "Defining Rhetoric—and Us: A Mediation on Burke's Definitions," refers to this move as "thinking at once on several levels" (339). Burke, in *The Philosophy of Literary Form*, posits "that when two opponents have been arguing, though the initial difference in their position may have been slight, they tend under the 'dialectical pressure' of their drama to become eventually at odds in everything. No matter what one of them happens to assert, the other (responding to the genius of the contest) takes violent exception to it—and vice versa" (139). There is no need for another paradigm shift because the study of intermodality is both/and instead of either/or. Unity, in lieu of dichotomy, is the way out.

The first investigation of intermodality in the field must do so from both a pedagogical and student-centered perspective because students, especially first-year writers, are the wary recipients of multimodal composition pedagogies, ideal people to question about the efficacy of pedagogies of multiliteracies and to research for evidence of intermodality. Many academic texts serve as how-to guides for teaching multimodal composition, but few stop to question whether it is effective for students. Testing the efficacy of these pedagogies with students' experiences in their own words is a necessary first step for this research, but the purpose of this case study is to employ remix and

transfer methodology to determine whether intermodality is at play within their multimodal composing practices.

1.7 Dissertation Outline

The following chapter introduces the purpose, research questions, institutional context, origins, research methods, target population, data collection and analysis, and limitations for this case study. To learn about student experiences with intermodality, I collected and crafted various research methods, especially remix praxis and transfer as an intermodal platform, to yield a methodology for this study; furthermore, this approach helps to avoid binaristic taxonomies and overdetermined terminology.

Chapter 3 analyzes students' experiences with multimodal composition for evidence of psychological, operational, and material intermodality to introduce these categories as a taxonomy of situated intermodality. I present data gathered from focus groups, follow-up interviews, and multimodal writing sessions with eight first-year writers as well as multimodal literacy narratives from the archives. Utilizing meta-awareness, the chapter describes intermodality as an essential component within students' multimodal composing practices and everyday experiences.

Chapter 4 employs remix, like McCorkle or Palmeri, as an analytical tool and drafting strategy to explode the multimodality myth, revisiting academic conversations alongside primary data from this case study to suggest intermodality as always already operative within multimodal composing practices and daily experiences (e.g. multiliterate identities and expressive commonalities). Ultimately, this chapter considers data and lessons from this case study to develop a framework for intermodal praxis (i.e. situated intermodality).

The conclusion of this case study provides implications for teaching and researching intermodal composition: a situated, remixed approach to multimodal composition pedagogy. Utilizing the concept of intermodality as a pedagogical tool for multimodal composition provides a change in perspective, instead of a contentious paradigm shift, to help deter the rhetorics of crisis, decline, and agonism that threaten additional fractures within the discipline. I offer intermodal praxis in this context because it encourages continued multidisciplinarity for the discovery of meaningmaking and persuasion in an increasingly hybrid—material/digital—world. While such a move could cause additional confusion, it is a worthwhile risk because intermodality offers a rewarding opportunity to move the field beyond myths and dichotomies that intensify long-standing arguments. I chose to listen to and research the multimodal composing experiences of first-year writers in their own words because they are on the front lines of Rhetoric, Composition, and Literacy Studies: compulsory composition.

2 INTERMODAL STUDENT EXPERIENCES IN FIRST-YEAR WRITING: A METHODOLOGY FOR REMIXING MULTIMODAL COMPOSITION

Because first-year writers in compulsory composition courses are the audiences of multimodal composition's introductory lessons, they are ideal subjects for researching the efficacy of such pedagogies as a platform for intermodal investigation. Alexander and Rhodes, in *On Multimodality*, posit that as our discipline "embraces technology and actively invites students in first-year and advanced composition courses to compose with new and multimedia, we need to ask about other possibilities for expression, for representation, for communicating meaning, for making knowledge." Intermodal investigations of multimodal composition will help us pose some of those

questions "to ask about possibilities that may exceed those of the letter, the text-based, the author, the *composed*" (4). Therefore, to conduct a case study about student experiences and intermodal possibilities, I listened to students' experiences with multimodal composition in their own words (focus groups, follow-up interviews, multimodal composing samples, and multimodal literacy narratives) to explore in what ways, if any, intermodality was an operative component.

All too often, authors create unhelpful genre boundaries and hierarchies of media that valorize the necessity of their own work and decry terms like "social media" as not unique enough, offering replacements such as "new new media" instead (Levinson 2). Conversations like these become unnecessarily difficult to follow and serve to exacerbate the print/digital dichotomy in Rhetoric, Composition, and Literacy Studies. In terms of multimodal composition,

student writing is doing something new—it's reshaping genre boundaries and changing what counts as academic knowledge. Faculty, students, and writing program administrators are responding to these new forms of literacy by creating in them, by writing in them, by pushing concepts and practices of what is possible to accomplish and create in a college writing course. (Bowen and Whithaus 4)

To learn "what else is possible" and avoid distracting polemics and hyper-digital positions, I crafted this specific research design (4). Using Bowen and Whithaus' guiding question, I expanded on that concept to find out what else might be possible for my research design in terms of intermodality: how can we address the multimodality myth, what tools will help us analyze these reshaping genre boundaries, and how can we account for hybrid modalities (e.g. audio-visual rhetoric) in conversations about

multimodal composition? The methodology I present in the following sections represents my answer to these guiding questions.

2.1 Purpose of the Study

In this study, I seek to unmask intermodality as a nearly invisible, contributive force within multimodal composition, specifically in the writing practices of first-yearcomposition students. Like Shipka's framework in Toward a Composition Made Whole, the research "framework I offer resists attempts to bracket off individual senses and the deployment of select semiotic resources, treating communicative practice as a dynamic, multimodal whole" (86). She warns against a tendency in the field to conceive of multimodal composition as entirely digital, arguing for the materiality of multimodality: "To label a text multimodal or monomodal based on its final appearance alone discounts, or worse yet, renders invisible the contributions made by a much wider variety of resources, supports, and tools." Doing so "masks the fundamentally multimodal aspects of all communicative practice" (52). This mask and focus on product represent a significant portion of the multimodality myth (e.g. multimodal composition as synonymous with digital composition), and those invisible contributions, which are the focus of this research design, constitute the process of multimodal composition: intermodality. The purpose of this case study is to apply McCorkle's example of remix methodology, which discourages dichotomous thinking, to conversations about multimodal composition and to answer Palmeri's call to build upon our rich multimodal heritage by including intermodality as one of those reimagined contemporary pedagogical practices.

Investigations of intermodality encourage harmony within the field, a way to unite previously opposed war camps under one tent. Via remix, McCorkle with remediation and Palmeri with multimodality provide methods to revisit academic conversations within Rhetoric, Composition, and Literacy Studies, and this project utilizes their approaches to remix disseminated ideas about multimodal composition and pedagogies of multiliteracies.

Like Ede and Palmeri, I am "very conscious that the discipline of composition studies is a deeply and complexly situated one—that there is great diversity in the student bodies we engage, the institutional contexts in which we work, the physical environments in which we teach, and the theoretical frameworks on which we draw (Ede)" (Palmeri 149). This methodology also seeks to answer the call of Jacqueline Jones Royster and Gesa E. Kirsch in *Feminist Rhetorical Practices: New Horizons for Rhetoric, Composition, and Literacy Studies:* "we must learn to ask new and different questions and to find more and better ways to listen to the multidimensional voices that are speaking from within and across many of the lines that might divide us as language users—by social and political hierarchies, geography, material circumstances, ideologies, time and space, and the like" (4). Just as Palmeri argues for the continuation of the field's rich multimodal heritage in which we teach, practice, and theorize, Royster and Kirsch argue for teacher-researchers to listen to new conversations already in progress.

2.2 Research Questions

These research questions guide this project:

• In what ways, if any, is intermodality an operative component of multimodal composition in the composing processes of first-year writers?

- To what extent is there a commonality of expression between different modalities? In other words, what can the modalities teach one another (transfer)?
- To what extent does the literacy myth, with its lures and legacies, extend to
 discussions of pedagogies of multiliteracies and multimodal writing pedagogies
 (i.e. the multimodality myth)?

In my effort to answer these research questions, I expected to find that students' experiences with multimodal composition differ slightly from academic conversations on the topic because such discourse rarely or briefly treats the multimodality myth or the interplay and fluidity of modalities for making meaning.

The New London Group's pedagogy of multiliteracies, recently updated by Cope and Kalantzis, connects closely with my own research about intermodality because "all forms of representation, including language, should be regarded as dynamic processes of transformation rather than processes of reproduction. . . . Meaning makers do not simply use what they have been given: they are fully makers and remakers of signs and transformers of meaning" (Cope and Kalantzis 175)." My hypothesis for this study is that educational experiences will verify the framework for pedagogies of multiliteracies and multimodal writing pedagogies to an extent and suggest that intermodal composition is an appropriate addition to challenge the multimodality myth and update those pedagogies.

2.3 Institutional Context

To research first-year writers' experiences with intermodality, I conducted this case study at Georgia State University (GSU)—ranked 2nd on *US News & World Report's*

2019 list of Most Innovative Schools and 2nd in Best Undergraduate Teaching ("Best Colleges"). Like Ede in *Situating Composition*, "I bring my own embodied knowing and passionate attachments to this study. As both a student and teacher, I have spent my adult life at state universities. Like many in composition, I feel a strong sense of commitment to public higher education" (21). With a large, urban campus in downtown Atlanta, GSU's main campus is an R1 research university with over 25,000 undergraduate students and "is nationally recognized as a leader in creating innovative approaches that foster the success of students from all academic, socio-economic, racial and ethnic backgrounds"; in fact, GSU "is among the most diverse universities in the nation and is a recognized leader in graduating students from diverse backgrounds" ("Best Colleges").

The Department of English at GSU is an ideal site for this study because it offers an undergraduate course entitled Multimodal Composition (ENGL 3115); furthermore, GSU's *Guide to First-Year Writing*, the required reader for compulsory composition courses (ENGL 1101 and 1102), contains sections on multimodality and digital literacies in its eighth chapter "Writing in Digital Spaces" (Christie and Arrington 353). Also, I utilized the Digital Archive of Literacy Narratives (DALN), a publicly available collection of literacy narratives and rhetorical artifacts in a variety of formats, for supplemental research about students' experiences with intermodality.

2.4 Study Origins

As I finalized this project's methodology, I found inspiration in Janet Emig's *The Composing Processes of Twelfth Graders* from 1971 and Nancy Sommers' "Revision Strategies of Student Writers and Experienced Adult Writers" from 1980 as lenses for

research design because they explore students' composing experiences in their own words: Emig worked with eight high-school seniors using vocal composition with audio recordings, whereas Sommers studied twenty students and twenty adults using essays and follow-up interviews. Like Emig, I chose to utilize audio recordings to research a small sample, comprised of eight first-year-composition students, but I chose two focus groups instead of vocal composition sessions; like Sommers, I chose to conduct follow-up interviews with writing samples so that the case study could also benefit from participants' reflection on previous sessions in multiple ways.

Because the concept of multimodal composition sprang from The New London Group's pedagogy of multiliteracies, I also used H. Lewis Ulman, Scott Lloyd DeWitt, and Cynthia L. Selfe's *Stories that Speak to Us: Exhibits from the Digital Archive of Literacy Narratives* from 2013, a digital edited collection of scholarly, curated exhibits, as a third and final lens for my research design. Editors Ulman, DeWitt, and Selfe put together a mix of curated literacy narratives, representing experiences across all walks of life. Ulman, in "A Brief Introduction to the Digital Archive of Literacy Narratives (DALN)," indicates that the editors "hope that the exhibits will inspire others to create similar exhibits, collections, and scholarly works that share insights about literacy gained through examination of the personal literacy narratives contained in the DALN." Inspired by Ulman's reasoning, I collected and curated multimodal literacy narratives from the DALN as a site of global literacy for this case study about student experiences with multimodal composition and intermodality. Later in this chapter, I will share which exhibits from *Stories that Speak to Us* that directly informed my data collection and analysis.

Multimodal composition, especially as it appears in first-year-composition courses, has become so ubiquitous that it is often reduced to boilerplate status (i.e. equating digital composing with multimodality); furthermore, conceiving of its purview as solely new media erases multimodality's operation historically; to be clear, the alphabet, writing itself, and the printing press were all once new media.⁴ Texts featuring multimodality as merely an end product or dissecting it into disparate parts have flooded the market; however, there are no studies that treat multimodality as an interconnected network of fluid modalities with inherent commonalities of expression: "[e]vidence remains that composition may not quite yet be meeting the challenge of incorporating multimodal and multimedia into its understanding of itself" (Alexander and Rhodes 5). The understanding of intermodality I advance in this case study aspires to meet this challenge, in part, through modal interconnectivity and fluidity in the study of multimodal composition. By calling attention to intermodality in student writing, we can begin to unpack the rich processes of multimodal composers, uncover commonalities of expression between seemingly separate modalities, and encourage the deliberate transfer between and across modal boundary lines. This intermodal approach provides an important update for pedagogies of multiliteracies that already feature multimodal composition. Our students live in an increasingly hybrid world where modalities collide and overlap across print and digital spaces, and the concept of intermodality gives us a way to address the resulting confusion in Rhetoric, Composition, and Literacy Studies.

⁴ See Eisenstein's *The Printing Press as an Agent of Change*; Graff's "Print, Protest, and the People" in *The Legacies of Literacy*; and Palmeri's "All Media Were Once New,' or The Technologies Composition Forgot" in *Remixing Composition*.

When researchers study students' own positionality in terms of multimodal exploration and literate practices, the process affords opportunities to transfer understandings about seemingly separate communicative modalities because

some modes are intrinsically close to others—so close in fact that one easily melds into the others in the multimodal actualities of everyday meaning. Written language is closely connected to the visual in its use of spacing, layout and typography. Spoken language is closely associated with the audio mode in the use of intonation, inflection, pitch, tempo and pause. (Cope and Kalantzis 179)

Lessons learned from remixing modalities may be transferred and exchanged, transforming students into designers of their social futures through written and oral language as well as sonic, visual, gestural, spatial, and personal representation. In *The Lure of Literacy*, Harker argues that "our current pedagogical and cultural moment provides an opportunity for first-year writing to become a site for both students and instructors to explore how multimodal and alphabetic forms of composing relate to each other" (113). *Multimodal Literacies and Emerging Genres* calls for us "to help students become more aware of these ways of working across multiple modes of communication," and this research design seeks to answer these calls to action (Bowen and Whithaus 2); furthermore, this case study about multimodal composition and intermodality considers the material as well as the digital in accord with Shipka's *Toward a Composition Made Whole*.

2.5 Research Methods

The mix of disciplinary and cross-disciplinary methods for this case study brings together inductive discourse analysis, archival research methodology, and narrative inquiry to research focus groups, follow-up interviews, multimodal writing samples, and multimodal literacy narratives. While grounded theory is closely related to this methodology, it is not operative within this case study because I began with a hypothesis instead of building a new theory via patterns in the data.

Ellen Barton's "Inductive Discourse Analysis: Discovering Rich Features," in Discourse Studies in Composition, asserts that "[i]n composition, the standard . . . has been to progressively enlarge the studies that incorporate discourse analysis so that they become multimodal studies of texts in contexts" (20). It is important to note, for the sake of this project's limitations, that critics of discourse analysis warn of its being too systematic or reductive. Barton argues "that the qualitative dimensions of discourse analysis are essentially the methodological process of induction, and [that the] process of inductive discourse analysis uncovers . . . rich features" (22–23). I use this method because it "involves looking at texts, inductively identifying their rich features and salient patterns, and then using these features and patterns as examples in an argument in support of some generalization(s) or claim(s) about the meaning relations between features, texts, and their contexts"; furthermore, "the concept of induction makes clear that the product of discourse analysis research is an argument" (23). Using Barton's understanding, I employ inductive discourse analysis to craft an argument via the discovery of rich features and analysis of primary data as multimodal studies of text in context: transcripts of focus groups and one-on-one interviews, multimodal writing samples, and archived digital literacy narratives.

For archival research methodology, I look to Nan Johnson and Lynée Lewis Gaillet. The literacy narratives that help construct the site of inquiry for this study are from the DALN, so I combine archival research and digital writing research methods for the collection, analysis, and curation of these stories. Like Selfe and Hawisher, I hope my "own turn to digital media [and] feminist perspectives . . . works to shape a powerful research methodology" (197). In "(Per)forming Archival Research Methodologies," Gaillet states, "[a]rchives are now viewed as primary sources for creating knowledge rather than mere storehouses for finding what is already known"; teacher-researchers in Rhetoric, Composition, and Literacy Studies, "who often investigate materials not originally assembled with writing instruction or instructors in mind, are familiar with creating new knowledge out of collected materials" (39). Archives, in this way, serve as a heuristic for writing and inductive analysis through collection. I agree with Nan Johnson's autobiographical chapter of Working in the Archives: "Collecting [is] thinking: thinking [is] collecting" (295). Making meaning from collected primary resources is generally an inductive process, and archival discoveries often lead to other studies and topics. Johnson compares "the archival process to an inexplicable dance between what we go to find and what is there to recognize" (292). She offers a specific method for collection and organization—the archival wheel—arguing that "the historical evidence, continually shaped by framed collecting . . . [provides] an intellectual hologram for the project, an insight hovering above the archive waiting to be seen" (294). The archival wheel informs my understanding that archives are able to tell stories all their own through multiple means like metadata, the digital equivalent of marginalia.

For narrative inquiry, I refer to Christine K. Lemley and Roland W. Mitchell's "Narrative Inquiry: Stories Lived, Stories Told": "Narrative inquiry is a qualitative

research methodology that critically analyzes social and cultural contexts of human experience. . . . A critical event approach to narrative inquiry focuses on what the research participant identifies as important to the story." This approach—"'What I know' and 'How I know it'"—is important to my consideration of focus groups, interviews, and literacy narratives because according to Lemley and Mitchell, "stories can explain experiences as well as serve as a catalyst for personal and social change in the lives of the participants telling the stories and in the lives of their audience" (215). I use narrative inquiry to prioritize what is important to each participant and maintain a critical distance from the work, which is necessary for my analysis of participants' narratives about experiences with multimodal composition and intermodality.

Remix and remediation are operative terms for inductive discourse analysis within this methodology because writers always already deliver multimodal compositions that represent transferred knowledge through the intermodal use of remixed fragments and remediated locales. McCorkle employs remix in terms of remediation to "tease out a cross-historical narrative based upon a theoretical rereading of rhetorical history" (8). Palmeri makes a similar move with multimodality "to resist the limiting effects of both binary taxonomies and linear progress narratives" by arranging his "historical tale as a kind of associative remix" (16). Kyle D. Stedman, in "Remix Literacy and Fan Compositions," posits that "much can be learned from detailed readings of words, images, songs, and videos that are mashed together from other work, but we can also move beyond readings." Stedman's remix theory seeks an active role in participation that moves beyond reading only, providing a helpful method for data analysis: "Text-centered approaches," Stedman continues, "focused on analysis of existing work, could be blended with practice-centered approaches that allow playful

experimentation and *composer-centered* approaches that allow amateurs to learn about the detailed choices composers actually make when composing" (107).

Like Palmeri's associative remix and McCorkle's remixed approach to case study, Stedman's remix theory offers a fresh perspective and blended approach for this project, which is why the follow-up interviews ended with students' playful experimentation with a multimodal writing sample via a practice-centered, composer-centered approach. Brian Ray's "More than Just Remixing: Uptake and New Media Composition" takes on genre theory in the scholarship of multimodal composition and digital rhetoric. According to Ray, current approaches "have yet to emphasize fully the larger rules and conventions that govern the interplay *between* different digital genres. . . . Greater attention to these extra-generic conventions can provide more nuance to current work on digital composing, social networking, and media convergence in college writing classrooms at all levels of instruction" (183). Ray's notion to focus on the interplay between different digital genres is part of this project's impetus. Taken together, these remix theories supply important considerations for my inductive discourse analysis of multimodality and inform my own ideas about remix via intermodality.

Transfer offers an important connection between intermodality, multimodal composition, and multiliteracies. Audio-visual rhetoric, for example, represents the cooperative transfer of rhetorical knowledge between the sonic and visual: not either/or but both/and (Burke 139; Coe 339). Without stopping to process the modalities individually, people often ask if you see what their spoken words mean or refer to an author's voice after reading her alphabetic texts. These elements would not be complementary in terms of persuasion if they did not share a commonality of expression. Harker posits that "we sometimes seem quick to make grandiose claims,

overselling significant differences between new media and textual or alphabetic literacies." He argues that a "disadvantage of doing so is that we might be missing the opportunity to understand what multimodal forms of composing and print-privileged literacies have in common—what they may be able to teach each other" (113). Without referring to it as such, Harker redirects part of the multimodality myth (print/digital dichotomy) and discusses psychological, operational, and material intermodality: the ability to teach and transfer across modalities and delivery systems. Psychological intermodality, which we employ daily, already allows for the subconscious transfer of those expressive commonalities across modalities; however, if we incorporate intermodal composition as a deliberate choice in our pedagogies, then students and teacher-researchers could begin experimenting with the conscious transfer of expressive commonalities across modalities.

In this case study, I use transfer to illustrate the ways students use intermodality to take what they know from one modality and use it in another (i.e. commonality of expression) because intermodality depends on transfer between modalities. Christina Donahue's understanding of transfer as the application of a learned knowledge to a person's current, somehow related, problem provides a useful perspective for this study (146). Writing Across Contexts: Transfer, Composition, and Sites of Writing by Kathleen Blake Yancey, Liane Robertson, William Paterson, and Kara Taczak allows us to contextualize Donahue's definition for pedagogical application. By continuing research on the subject within Rhetoric and Composition, they seek to address the transfer question, a "question [that] asks how we can support students' transfer of knowledge and practice in writing; that is, how we can help students develop writing knowledge and practices that they can draw upon, use, and repurpose for new writing

tasks in new settings" (2). Transfer is a useful tool for exploring and sharing intermodality with writing students because multimodal composition becomes richer as meaning-makers find new ways to transfer rhetorical competencies and strategies across modalities; for example, a Creative Writing student who is accomplished in drafting dialogue for alphabetic text might have success transferring some of that proficiency to craft effective podcasts. Because modalities share a commonality of expression, transfer offers a method for intermodal composition because students can take what they know from one modality and use that knowledge in another modality. By encouraging transfer within and between various modalities, this research offers a way to answer part of the transfer question for the fields of Rhetoric, Composition, and Literacy Studies.

Using meta-awareness to transfer multimodal composing practices across modalities reveals interactions among mental and visual languages, allowing for the exploration of multiliteracies via comparison and another step toward inclusivity in the study of multimodal composition. In "Introduction: Into Sound," collection editors Michael Bull and Les Back argue that *The Auditory Culture Reader* "is primarily concerned with sound but we do not want to supplant one 'primary sense' with another. Rather, our book is about moving into sound and the opportunities provided by thinking with our ears." This multisensory metaphor is evidence of psychological and operational intermodality. "As Richard Sennett points out in this volume," Bull and Back write, "it is difficult to separate out our senses, so the sounds produced through the musician's art are products of his or her sense of touch and feel" (3).

Audio-visual rhetoric serves as an effective example of psychological and operational intermodality because sonic and visual modalities share expressive

commonalities. For example, transferring visual imagery and mental languages to understand the sonic becomes possible by thinking with our ears⁵ to revisit Hocks' "Understanding Visual Rhetoric in Digital Writing Environments." She introduces visual rhetoric as "visual strategies used for meaning and persuasion," citing Richard Lanham's *The Electronic Word* and his "making explicit oral and visual rhetorical concerns that were buried in the last two centuries of print culture and conventions." Hocks employs "elements of visual rhetoric from moving image studies and design fields as well as [draws] more upon . . . visual culture" (630). Because modalities share a commonality of expression, this borrowing for meaning-making among modalities and disciplines is possible.

Similarly, I complicate this conversation about visual rhetoric with aurality to reveal contemporary digital rhetoric as intermodal because according to Brandon LaBelle's *Acoustic Territories: Sound Culture and Everyday Life*, "[t]he temporal and evanescent nature of sound imparts great flexibility, and uncertainty, to the stability of space. Sound disregards the particular visual and material delineations of spatial arrangements, displacing and replacing the lines between inside and out, above from below" (xxi). Monomodal study or communication on any level is impossible because the modalities are interconnected and share commonalities. To begin discovering the possibilities of intermodal analysis and transfer between modalities, consider the effects of including the concept of audio in Hocks' groundbreaking article on visual rhetoric and replacing "audio-visual" for "visual" in this quotation:

To explain [audio-visual] rhetoric online to our students, we can begin by carefully articulating the rhetorical features we see [and hear] in various

⁵ See Adorno's *Prisms*.

interactive digital media. In our classrooms, we can also begin to break down the processes for creating successful digital documents, first by simply looking at [and listening to] the computers around us and analyzing them as intensely [audio-visual] artifacts. (631)

This method provides another way to approach the study of intermodality. We can make similar moves with any of the modalities using most of the current scholarship treating multimodality. Doing so only requires a bit of imagination. For example, Hocks' article is ostensibly about visual rhetoric, but she frequently treats other modalities to illustrate her argument: "The screen itself is a tablet that combines words, interfaces, icons, and pictures that invoke other modalities like touch and sound. But because modern information technologies construct meaning as simultaneously verbal, visual, and interactive hybrids, digital rhetoric simply assumes the use of visual rhetoric as well as other modalities" (631). Like Hocks does with the visual, I utilize elements of sonic rhetoric from Sound Studies and audio-visual writing pedagogies as well as draw on the audio-visual culture "within which our students work, live, and learn" because "digital rhetoric . . . focuses on the multiple modalities available for making meaning using new communication and information technologies" (630; 632). With these methods from Hocks, Lanham, Selfe, and other teacher-researchers, I also employ and transfer elements of digital rhetoric from existing conversations about visual rhetoric and across the many disciplines studying multimodality and new media to visualize sonic composing strategies as intermodal (i.e. interrogating multisensory metaphors and transferring commonalities of expression from visual culture to the sonic).

2.6 Target Population: A Broad View

In the following chapters, I share and discuss specific findings about the target population of this study from focus groups, follow-up interviews, multimodal writing samples, and multimodal literacy narratives to contextualize those findings with intermodality within Rhetoric, Composition and Literacy Studies; however, this section provides an overview of the target population for this case study.

For the purposes of this research, I facilitated these focus groups, one-on-one interviews, and short writing sessions with undergraduate students at GSU enrolled in first-year composition during the fall of 2017 and spring of 2018. Reaching out in the spring afforded me the opportunity to speak with those students who had recently taken first-year-composition courses that discuss multimodality. As I have learned from my own educational experiences, students tend to be more forthcoming in peer groups and open discussion, so this research began with focus group sessions before individual interviews. Of the eight participants, seven of them identify as female. Two participants were born outside of the United States and provide transnational perspectives on multimodal composition and intermodality. As for their majors, the participants represent a broad range of professional interests: Marketing, Finance and Accounting, Media Entrepreneurship, Music Industry, Music, Philosophy, Psychology, and Political Science; one participant seeks a minor in Sociology. Interestingly, they all indicate plans to incorporate multimodal composition in their future professions.

2.7 Data Collection

Before conducting focus groups and interviews, I sought approval from GSU's Institutional Review Board (IRB). After being approved on March 22, 2018, I scheduled

focus groups before requesting follow-up interviews with writing samples, all of which took place in a reserved conference room in the Department of English at 25 Park Place. I used an audio recorder for each session for data collection. During the sessions, I took notes based on my observations in the moment to facilitate discussion. Prior to each of these sessions, I requested that participants sign a consent form that permits me to record and publish the results. Before moving forward, I explained my intent to assign each student a pseudonym to protect their anonymity upon publication. Participants were aware that they could leave the study at any time.

As a framework for research design, those three studies—Emig; Sommers; Ulman, DeWitt, and Selfe—informed my creation of focus group and interview questions (ten for each session). For the twenty questions, I did not intend to address intermodality explicitly in the focus groups and interviews because it is a nearly invisible, contributive force that would require precious time to explain in detail; furthermore, these sessions represent the first foray into studying intermodality within multimodal composing practices, so I felt it ethically necessary to test the theory for legitimacy before disseminating it without evidence. Overall, my goal in these focus groups, follow-up interviews, multimodal writing sessions, and archival adventures was to listen to and learn from students' own experiences with multimodal composition to reveal intermodality as an essential component. Taken together, these multiple approaches provide various inroads to begin verifying the existence of the multimodality myth and exploring intermodality through case study.

2.7.1 Focus Groups: Development and Administration

I conducted focus groups before the individual interviews to encourage reflection, an effective tool for qualitative research. For recruitment, I requested classroom visits with fellow graduate teaching assistants who teach multimodality in first-year-composition courses. Ultimately, I conducted two focus groups in the spring with eight students who completed a first-year-composition course during the 2017–2018 academic year: each focus group had 3–5 participants.

In the focus groups, I asked ten questions, starting with general experiences with multimodal composition and moving to specific experiences with the fluidity and interconnectivity of multimodality:

- 1. How do you define multimodal composition?
- 2. What were your expectations of composing with a mix of visual, sonic, alphabetic, spatial, gestural, and/or personal expression?
- 3. How did your expectations compare to your experiences with multimodal composition?
- 4. What types of academic projects have you completed using multimodal composition?
- 5. What types of personal projects have you completed using multimodal composition?
- 6. In what ways, if any, do you employ multimodal composition for non-digital projects?
- 7. What is your process for choosing which modalities to engage and which to ignore?
- 8. Based on your experiences, where do the separate modalities overlap?

- a. Do you listen to music or watch something while writing essays?
- b. Do you gesture with hands or walk around while talking on the phone?
- c. Do you consider spatial organization for alphabetic or visual projects?
- 9. Does visualization (mind's eye) play a role in your multimodal composing process? If so, how?
- 10. How might you use what you've learned about multimodal composition now or in the future?

For the focus group questions, I wanted to begin with participants' own working definition of multimodal composition to set the tone for the session. The first half of the focus group questions deal with definitions as well as personal and academic experiences with multimodality; for the second half, to explore intermodality, I decided to move in closer topically to ask about multimodal writing process, visualization, and future application beyond the classroom. These questions are open-ended to encourage a fruitful discussion in students' own words.

2.7.2 Interviews: Development and Administration

To recruit students for interviews and multimodal writing samples, I reached out to focus group participants. Because Emig and Sommers' foundational works in Rhetoric and Composition employ similar approaches, I followed up with students from each focus group, ultimately conducting a total of seven interview sessions with written components (one student had to drop out of the study for nonacademic purposes). In the follow-up interviews, I used another set of ten questions for a more individualized approach. Often referring to their focus group answers, I sought to discover some of the various ways multimodal composers employ intermodality in their writing processes:

- 1. What is your major?
- 2. What were your favorite and least favorite experiences with multimodal composition?
- 3. Could you elaborate on your experience participating with multimodal composition?
- 4. For multimodal composing projects, how do you choose which modalities to engage and which to ignore (visual, sonic, alphabetic, spatial, gestural, and personal expression)?
- 5. For academic projects, which modality do you use most often? Why?
- 6. When engaging that specific modality (answer to previous question), which other modalities are important to your process? Why?
- 7. For personal projects, which modality do you use most often? Why?
- 8. When engaging that specific modality (answer to previous question), which other modalities are important to your process? Why?
- 9. Do you read parts of your alphabetic writing aloud during the composing process? If so, why?
- 10. In what ways, if any, has multimodal composition affected the way you write overall?

For the interviews, I wanted to expand on students' answers in the focus groups, so the questions are much more specific with a focus on multimodal composing processes. Starting with their majors, I asked questions that encouraged participants to talk about their professional identity before moving on to their experiences with multimodal composition. Most of the interview questions focus on multimodal composing processes and experiences, both academic and personal. To encourage discussion about

intermodality, I asked about their reading alphabetic writing aloud and considering ways in which multimodal composition affect their writing processes.

2.7.3 Multimodal Writing Samples: Development and Administration

I requested that the interviewees compose a short, multimodal message, using only pencil or pen and paper and employing at least two modalities (alphabetic, sonic, visual, gestural, spatial, or personal) to the best of their ability; furthermore, to afford for additional reflection, I asked that they indicate which modalities they engaged by circling them in the provided list. My aim in asking for multimodal writing samples was twofold: 1) use materiality to explore intermodality with an awareness of Shipka's warning about the digital turn in multimodal composition (25); and 2) gather data grounded in deliberate acts of multimodal composition, providing another source of student experiences in first-year writing for this case study.

2.7.4 Multimodal Literacy Narratives: Collection and Curation

In an effort to explore local and global multiliteracies and the connections between them, I supplemented these conversations with multimodal literacy narratives about student experiences from the archives because Selfe and Hawisher "believe that the literacy narratives that we and others continue to collect will assume increasing importance in the coming decade as scholars attempt to probe the globalized literacy environments that many today inhabit" (198). Although I do not treat specific narratives in this chapter, the exhibit I curate and present in this dissertation features students'

multimodal composing experiences and multiliterate practices as primary data to connect the local (GSU) to the global (DALN).

For my own collection and curation, I look to David Bloome's "Five Ways to Read a Curated Archive of Digital Literacy Narratives" in *Stories that Speak to Us*: "I realized that engaging in diverse readings and being able to hold on to all of them without needing to defenestrate any or privilege one over another provided for me the deepest insight into narrative, literacy, and the particularities of people's daily lives." Of his five reading methods, two work particularly well for this research design: "exploding the framing" and "people matter, what they say matters, and particularity matters."

Bloome argues that "there are ways to read these curated exhibits that 'explode' the theoretical framing and thus create new meanings and ways to interpret people's narratives": for example, "eliminating the distance between researcher/scholar and subject (they are one in the same) and embedding theorizing as part of their lived experiences (exploding the separation of theory and data)." I used this reading method for my own archival exploration at the DALN and encourage readers of my own exhibit to do the same. Adding "another way of 'exploding' the theoretical framing," he "emphasizes reading the curated exhibit by foregrounding what the people themselves say and viewing the particularity of their lives as key to definitions of what it means to engage in literacy events, practices, and histories, and as key to what it means to be human." Similarly, I listened to students' experiences in the archives to foreground their own words to explode the multimodality myth, which is a theoretical framing unto itself.

As for Bloome's other reading method that is operative within this study, he suggests "an emic understanding and to privilege the particularities of people's lives . . . (the particularities of their narratives and how they tell them) to better understand what

it means to be human . . . and to better understand ourselves within the particularities of our own lives." Because the impetus of this case study involves an emic approach (from the perspective of the subject) to student experiences, I employed this reading method with the multimodal literacy narratives I collected and curated "to slow down my reading, listening, and viewing of the recorded narratives . . . in such depth that I could 'see' what was happening" (Bloome). Material intermodality is an essential component of *Stories that Speak to Us*, making it ripe for intermodal exploration, but Bloome's multisensory metaphor, which represents psychological intermodality, solidifies the importance of this reading method for unpacking students' intermodal experiences treated within their multimodal literacy narratives.

2.8 Data Analysis

The data for this research project is qualitative, focused entirely on students' experiences in their own words. To triangulate my findings, I chose four sites of analysis for this case study: focus groups, follow-up interviews, multimodal writing samples, and multimodal literacy narratives. I transcribed all focus groups and interviews and analyzed the multimodal writing samples to review these experiences as multimodal texts in context (local literacy). The archives provided supplemental research from students and teacher-researchers working with multimodal composition and multiliteracies (global literacy).

As for data management, I stored scanned copies of the writing samples, the audio recordings of focus groups and interviews, as well as the transcribed data in an unshared folder on my computer. As indicated on my IRB research protocol and consent forms, I destroyed the recordings after thirty days. Participants' identifying information

was separate, at all times, from the data because I saved the key sheet in another folder only accessible to me. In my GSU office, I stored consent forms in a locked cabinet, and only I have the key. Furthermore, I destroyed that data by deleting the files from my folders and clearing the recycle bins on computers where those files were deleted and by shredding consent forms after the study completed.

Throughout the analytical process, I scanned primary data for emerging and reoccurring codes to discover patterns and develop themes, and I triangulated those themes based on theories from secondary research. Johnny Saldaña's *The Coding* Manual for Qualitative Researchers served as a guide for my coding process: "A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data"; like Saldaña suggests, I used coding because it "attributes interpreted meaning to each individual datum for later purposes of pattern detection, categorization, assertion or proposition development, theory building, and other analytic processes" (4). Ultimately, I was interested in learning how actual student experiences with multimodal composition compare with published expectations of pedagogies of multiliteracies and multimodal writing pedagogies to argue for the inclusion of intermodality. To develop codes for primary data, I cycled through a cursory review of the data in this order: focus groups, follow-up interviews, multimodal writing samples, and multimodal literacy narratives. For first cycle coding, I used two methods: In Vivo Coding (uses participants' actual language) and Structural Coding (tests hypothesis). For second cycle coding, I used two other methods: Focused Coding (locates frequent/significant codes) and Pattern Coding (identifies emergent themes).

While there are far too many to list in this chapter, I offer a few of the most prevalent codes in the following sections.

2.8.1 Focus Groups: Analysis

There are two codes that occurred repeatedly throughout the focus groups: definition of multimodal composition and operational intermodality. To be clear, the first question in the focus groups is about students' personal definition of multimodal composition; however, participants used the topic as a rhetorical platform, often returning to their original answer with an updated understanding that resulted from the group's conversation. Because their multimodal experiences are the focus of this case study, understanding how they define multimodal composition informed the rest of their responses to focus group questions and my approach to coding them. Their collective definitions reveal intermodal processes: the fluidity and interconnectivity of multimodal composition.

Though I coded the focus group transcripts for intermodality using the psychological, operational, and material categories, operational intermodality emerged most often. Also, psychological and operational usually appear together, frequently in the same datum. Perhaps, if students were aware of intermodality, the other categories might be more prevalent; however, this research design illuminated operational intermodality as a frequent, reoccurring theme in student responses. For example, in the first focus group, two participants discussed the sonic nature of traditional print essays in terms of flow and voice, indicating a need for them to read aloud and listen to their own voice for alphabetic composition.

2.8.2 Interviews: Analysis

Psychological and operational intermodality were prevalent in the follow-up interviews as well, but identity occurred more frequently than definition in the interviews. During these one-on-one sessions, students were much more forthcoming with their multiliterate identities and positionality in terms of intermodality; in fact, the identity and operational intermodality codes often overlap in these transcripts, offering a glimpse of situated intermodality and the nature of students' intermodal choices for multimodal composition. While academic projects in composition courses were part of the conversation, some of the most enlightening examples of operational intermodality appear in narratives about participants' daily lives: motherhood, exercise, musical practice and performance, fan art, and work in public relations, to name but a few.

2.8.3 Multimodal Writing Samples: Analysis

While I applied inductive discourse analysis throughout my research processes, the method was especially important to my rhetorical, textual analysis of participants' multimodal writing samples. It is important to note that despite the prevalence of the multimodality myth, these students had no problem understanding the materiality of multimodal composition for these sessions. Each of the seven participants took on the task without asking what I meant by composing multimodally using only pen or pencil and paper.

Offering personal messages of hope, joy, stress, and caution, participants employed operational intermodality to compose among the sonic, visual, alphabetic, gestural, spatial, and personal modalities to yield multimodal compositions (i.e. material intermodality). Again, intermodality is not a replacement but an internal

component of multimodality, a contributive force existing behind the scenes and assisting the process of crafting multimodal meaning. Reflecting on their own multimodal writing, three participants said they used four modalities, two participants used five modalities, and the remaining two used six modalities—all participants indicated the interplay of their chosen modalities was essential to the meaning of their messages.

2.8.4 Multimodal Literacy Narratives: Analysis

As a model for my analysis and presentation of multimodal literacy narratives, I drew on Scott Lloyd DeWitt's "Optimistic Reciprocities: The Literacy Narratives of First-Year Writing Students" from *Stories that Speak to Us* as well as Gaillet's archival methodology and Johnson's archival wheel. Like DeWitt's application of neuroscientific theory to his exhibit of first-year-writing students' narratives, my curation in the following chapters applies psychological theory to multimodal composers' narratives. Although these narratives "represent highly motivated, self-selecting students, they also create a profile of student literacy practices, conveyed in stories prompted by openended questions, that demographic information cannot" (DeWitt). I situated this case study at the intersections of Rhetoric, Composition, and Literacy Studies because multimodal composition originates from pedagogies of multiliteracies; therefore, multimodal literacy narratives that employ intermodality represent the fourth and final source of primary data for this dissertation.

2.9 Limitations

As with any research, this project has limitations to address. Case study methodology does afford an opportunity for intensive, detailed study but carries with it several constraints. In accord with Ede in *Situating Composition*,

I want to acknowledge, however, that as is the case with all scholarly work, there are limitations as well as advantages to my effort. I also want to acknowledge that although I have attempted to interrogate my own assumptions and practices—to implicate myself in, rather than distance myself from, that which I analyze—I can never fully succeed in doing so. (29)

Although I chose an emic approach to close the distance between researcher and subject, I recognize that the researcher's perspective can affect the process through the development of bias; becoming too close to data and desired outcomes is part of the risk of this approach. The Hawthorne effect (i.e. observer effect), a commonplace in any research with human subjects, could be another limitation because people sometimes behave differently when they are subjects of observation.

Within case study methodology, researchers can introduce new research, but readers are unable to replicate the data exactly, a point of contention for critics of this methodology. Another concern is external validity: what can one case offer besides the particular? Teacher-researchers in Rhetoric, Composition, and Literacy Studies benefit from the time-honored case study methodology despite its general limitations. New research disseminated via details of one case inspires teachers to test resulting theories in seminars and workshops, and even though the data cannot be replicated exactly, researchers may find inspiration for their own case studies and methodologies.

There are additional limitations to this project beyond general issues with case study methodology. Firstly, "discourse analysis can sometimes get lost in the contextual fascination of detailed case studies or larger ethnographic investigations; with their lengthy descriptions of meaning in context, these studies often concentrate more on the roles of texts in general than the details of texts in particular" (E. Barton 20). The particulars and details of texts based in human experiences (i.e. transcribed primary data) are central to this case study. Secondly, the multidisciplinary nature of this research widens the scope to include Rhetoric and Composition as well as Literacy Studies, splitting the theoretical focus and straining the capacity for in-depth inquiry, but doing so also provides opportunities for additional research. Thirdly, the target population is comprised of first-year-composition students who have limited exposure to multimodal composition. While these students represent a sensible starting place, the population could be a limitation as well; however, this approach also points to possibilities for future research with advanced undergraduate or graduate students who have a stronger theoretical understanding of multimodality. Finally, the most specific limitation involves the questions for focus groups and interviews. To forestall confusion, I decided not to address intermodality explicitly with participants to avoid overwhelming them with excessive terminology; this limitation also points to possibilities for future research with participants who understand intermodality as a component of multimodal composition.

3 SITUATED INTERMODALITY: CONSIDERING THE PSYCHOLOGICAL, OPERATIONAL, AND MATERIAL IN STUDENT EXPERIENCES WITH MULTIMODAL COMPOSITION

At once an investigation of a contemporary issue but also a throwback of sorts, this case study is just as much a call for listening to students as using intermodality for multimodal composition. From 1971 to 1986, Janet Emig, Mina P. Shaughnessy, Nancy Sommers, and David Bartholomae contributed to the academic conversations of Basic Writing, shifting the focus of writing research to students' composing processes. With this line of thought, they helped create the field. Although the process movement does represent a paradigm shift in Rhetoric and Composition, it also solidified the rhetorical tradition of taking students' writing, experiences, and literate practices seriously; therefore, as chapters 1 and 2 demonstrate, I seek to continue along those same lines with intermodality in students' multimodal composing processes. By researching what might seem as unimportant or background in the writing lives of students, we learn once again to listen to what these novice writers have to say.

The purpose of this chapter is to enter this historical conversation and extend it to include situated intermodality via Emig's approach to compositional categorization in *The Composing Processes of Twelfth Graders*. She presents her data "in two forms: as an outline . . . and as a narrative. The use of an outline, which is of course linear and single layered, to describe a process, which is laminated and recursive, may seem a paradoxical procedure; but its purpose is to give a category system against which the . . . case studies can be examined." Similarly, as I lay out in detail in chapters 1 and 2, I

⁶ See Emig's *The Composing Processes of Twelfth Graders*; Shaughnessy's *Errors and Expectations: A Guide for the Teacher of Basic Writing*; Sommers' "Revision Strategies of Student Writers and Experienced Adult Writers"; and Bartholomae's "Inventing the University."

employ an outline for the multimodality myth and situated intermodality to examine this case study's primary data. Like Emig, I present this research narrative in "an attempt to convey the actual density and 'blendedness' of the process." I also set forth the taxonomy before analyzing data; however, in following Emig's example, this category system was derived from extensive analyses of case studies. Ultimately, the analytical procedure was inductive, whereas the research presentation is deductive. For the remainder of this chapter, I will set forth a taxonomy of situated intermodality and use it to analyze the primary data that comprise this case study. Like Emig's methodological example, I use a blended approach for this exploration, drawing on definitions from rhetoric of the field, focus groups, interviews, and multimodal writing samples for this argumentative narrative.

Just as margins between the rhetorical canons and phases of the writing process serve as useful guidelines for the field, situating intermodality into categories provides a helpful taxonomy "to delineate dimensions of the composing process . . . against which case studies . . . can be analyzed." As I argue in the previous chapters, this categorization should not be taken as absolute or totalizing. To study intermodality is to study the marginal or temporary within a specific milieu, so future studies in this area could take different approaches with intermodality and situate it using another taxonomy; however, "there are elements, moments, and stages within the composing process which can be distinguished and characterized in some detail" through the lens of situated intermodality (Emig 33). What this case study has uncovered and what this chapter will reveal is evidence of psychological, operational, and material intermodality in students' multimodal composing processes and experiences.

Because the communicative modalities share commonalities of expression, as Bowen and Whithaus argue in "What Else Is Possible," "[u]nderstanding the interactions and relationships between different expressive modes is integral to understanding the composing processes and enabling students to develop their own writing techniques fully" (7). In response to this argument, I situate intermodality into the categories of psychological, operational, and material for this case study because "students will continue to make and remake what writing looks like within emerging multimodal discourse environments; however, faculty and administrators can help shape student experiences, so that the learning that occurs in college writing courses prepares writers for the challenges they will face later in life" (10). Ultimately, I will analyze students' multimodal composing processes and experiences so that teacher-researchers can help students develop their writing for contemporary audiences.

The strengths in this blended approach to case study are the possibilities it provides for the development of student-centered pedagogies. Utilizing multiple definitions from various sources allows for triangulation of sources, which is necessary in qualitative analysis; furthermore, it illustrates the various ways students and teachers characterize multimodal composition. Once we understand the nature of this conversation, we may use these perspectives as a foundation for pedagogical application and additional research. By exploring students' communicative experiences, I seek to advance the study of multimodality and continue the field's cause of listening to novice writers; however, there are potential shortcomings in this work.

Critics of multimodality and new media argue that Rhetoric and Composition is pushing too far beyond its disciplinary boundaries when the field should be focused solely on writing, which they define with a product-driven understanding of the print paradigm. Some readers could conceive of this target population as a vulnerability because contemporary studies in the field rarely contemplate student opinions; furthermore, Emig posits that "[m]ost pieces of empirical research on the adolescent writer focus on the product(s) rather than the process(es) of their writing and, consequently, do not provide an appropriate methodology for a process-centered inquiry" (19). I seek to heed her warning by situating student experiences at the forefront of this research, which is the unique contribution of this project because it documents students' feelings on multimodal composition in this moment. In On Multimodality, Alexander and Rhodes posit that because "composition as a discipline embraces technology and actively invites students in first-year and advanced composition courses to compose with new and multimedia, we need to ask about other possibilities for expression, for representation, for communicating meaning, for making knowledge." Intermodal composition affords the field an opportunity to explore such possibilities in the age of social media: "We need to ask about possibilities that may exceed those of the letter, the text-based, the author, the composed" (4). By considering students' experiences with multimodal composition, teacher-researchers in Rhetoric, Composition, and Literacy Studies can craft pedagogical frameworks that address the intermodal overlap among modalities.

3.1 Defining Psychological, Operational, and Material Intermodality

I situate intermodality using this taxonomy to redirect the multimodality myth to more progressive ends, including the exploration of students' multimodal composing experiences in this case study, but applications of this categorization are not limited to students or even composition. Psychological intermodality, as discussed in chapter 1,

describes the subconscious, cognitive process people engage continuously to shift their focus between various competing stimuli and navigate the multimodal explosion of rhetorical appeals that constitute daily life. A concept originating in the field of Psychology, intermodality defines an interaction between the various human senses (Zieber et al. 69); furthermore, our senses never function in isolation from one another, guaranteeing the multimodality of our communicative environment (Kress 181). Many folks hum tunes or play music while working and wave their hands while giving directions over the phone, and some pianists play by ear; I catch myself substituting the word "see" for "understand" regularly: these situations exemplify psychological intermodality, the subconscious, fluid refocusing of mental resources between modalities and their sensorial output.

Intermodal perception is one of the many processes enabled by psychological intermodality; according to Albert A. Johnstone in "Spontaneity and Intermodal Perception," it "is automatic, ubiquitous, and perplexing. It is perception in which the observed object is perceived as having properties in sense modalities other than the one in which the object is sensuously present" (137). This type of perception belongs primarily to the realm of psychological intermodality because it is subconscious. Johnstone likens the concept to the process of choosing a piece of fruit to eat, saying that when he goes "to pick up an appealing apple, I unthinkingly perceive it as having certain further characteristics, one from sense modalities other than vision, and not actually present sensuously in my experience. I expect it to be firm under my grasp, to have a manageable weight, as well as a flavour, an aroma, and a texture, each of a somewhat specific sort" (138). As this example illustrates, intermodal perception enables us to have a sort of sensual expectation based on previous experiences even

though such characteristics are not sensuously present (e.g. salivating in anticipation of food from visual stimulus).

Operational intermodality characterizes the conscious usage of interconnected modalities for interpreting and making meaning, but the boundary between psychological and operational intermodality is dynamic. When Johnstone finally picks up his apple, he employs operational intermodality after perceiving the object via the psychological. Our thoughts become operations through intermodal processes; for example, the term "multimodal composing" when used as a verb describes psychological-operational intermodality. Johnstone argues that "situations in each modality occur contemporaneously with situations in the other modalities. In addition, events in the various sense-fields are experienced as spatially located with respect to the lived body" (138). Audiences utilize their intermodal perception to decipher a text's multimodal appeals, and individuals use it when they transfer their thoughts into a medium. When an architect drafts blueprints, she may listen to music or play the news in the background; inevitably, these multisensory heuristics affect the work throughout parts of the process even though their effects are not apparent in the building. An artist might prefer the noise of a bustling tourist spot like a beach or town square for his paintings; however, he will need to tune out a cacophony of dissonance to focus.

This ability to shift one's focus between competing multisensory stimuli (psychological) to complete a task (operational) utilizes overlapping intermodal processes: "Touch involves sensations experienced as adjacent to some region of the lived body. Visual objects are located in front of one's proprio-sentiently experienced eyes. Smells and tastes are located within the lived body, in the nasal cavity and the tongue respectively. Sounds are experienced as enveloping the lived body and as coming

from a certain direction relative to that body" (138). For clarity, "proprio-sentience" is an unambiguous term that describes a sixth sense "that permits awareness of the diverse feelings that arise within one's body"; Cope and Kalantzis refer to this sensual realm as "one's mind's eye" (179). The subconscious functions of intermodality, which employ sensual expectations as a platform for multisensory analysis, belong to the psychological realm (e.g. imagination), whereas conscious usage of intermodal means, even within one's own mind, represents the operational (e.g. visualization). Our individual senses are interconnected via mental pathways and interact through visual languages, so we can even consciously utilize intermodality without knowing it exists because intermodal matching is inherent to the human condition (Condit 104; Zieber et al. 69); in other words, we are always already intermodal.

Operational intermodality involves the conscious, and psychological intermodality includes the subconscious; therefore, the resulting products and their media or carriers comprise material intermodality. Johnstone researches "how events occurring within these . . . sense modalities come to be integrated and so form multimodal objects in one spatial world" (138); therefore, the term "multimodal composition" when used as a noun describes material intermodality. In fact, partial transfer between modalities is possible even though modalities "cannot be directly and completely translated into another" (Cope and Kalantzis 180); although Cope and Kalantzis intimate that direct transfer between modalities is impossible, the study of intermodality does offer a means to explore what commonalities exist between modalities because "[m]uch of our everyday representational experience is intrinsically multimodal" (179). Even though a multimodal object may seemingly belong primarily to a specific modality, it is intermodal due to its multisensory nature: "Tactile objects

consist of more than mere temporary feelings of epidermal pressure. Tastes, smells, and sounds carry no trademarks indicating their place of origin. Visual phenomena, although located before one's eyes, are free of contact with the body, and so could in principle be part of a causally unrelated world," like items on a TV screen (139). Johnstone's apple is material intermodality in a sense because it mentally occupied various modalities in the lived body and underwent a multisensory analysis via intermodal perception: at once a tactile, flavorful, olfactory, aural, and visual sensation in his mind's eye. Machines, screens, and nonorganic things also depend on intermodal processes for the movement of messages across modalities and media. Just as a product could move between ships, trucks, trains, and planes, a message could move through the sonic, visual, alphabetic, spatial, gestural, and personal before arriving at its destination. Like a shipping crate or Johnstone's apple, multimodal compositions are intermodal in a material sense because they exist among overlapping boundaries between modalities without separating the modalities at each point of transfer: material intermodality defies standard restrictions.

Intermodality is an elusive concept because its operation within multimodal processes is nearly invisible. It functions beyond the modal boundaries and across the margins between psychological, operational, and material means; however, meta-awareness and intermodal perception render its study possible. While I situate intermodality this way to explore its possible application, doing so forces a rhetorical structure on a dynamic, open system. This taxonomy is valuable for research and pedagogical purposes, but it represents one of many possible intermodal situations. I share these categories—psychological, operational, and material—in the spirit of other rhetors' work in the field like Donald C. "Stewart's five strands [of nineteenth-century

rhetoric] or James Berlin's three systems of American rhetoric" (Gaillet, "The Nineteenth Century" 153); however, the taxonomy I offer for situated intermodality is not beholden to student experiences even though I utilize it in this manner, and as I indicate in this chapter's introduction, this categorization is in no way meant as a totalizing structure.

3.2 Defining Multimodal Composition on Their Terms

As the previous section demonstrates, intermodality is an essential component of multimodal composition, so I began the focus group conversations with participants' definitions of multimodal composition. Several of them define multimodal composition in academic terms, lining up with Rhetoric and Composition's tradition of multimodality. Valery conceives "of composition as works, and multimodal would mean that it's a multiple of different models working together to create something pretty awesome." Similarly, Geoff defines "multimodal composition as several different pathways to get a point across and to maybe influence someone's thinking or opinions on a topic or subject." These participants' definitions align with the field's conception of multimodal composition. Also focused on the modal aspect of multimodality in composition, Maggie defines "it as multiple modes of communication," and Dawn conceives of multimodal composition as "many methods of communication, whether it's written, verbal, musical—means in writing or projects." These first-year students understand the concept as multiple modes or pathways for contemporary communication, and their characterizations reflect the academic tendency to define multimodality in line with the field's rhetorical traditions.

The remaining participants define multimodal composition in slightly different ways. Phoebe "think[s] of really creative elements and a lot of visuals," and Pabla indicates "the expectation that comes with learning about multimodal composition brings an element of creativity that you may not have noticed beforehand because everything can be technically multimodal, and it turns whatever—like a school paper or something you were trying to write—it turns that into something artistic." She adds that "multimodal composition reminds me of music . . . like learning how to play the violin. I play the keyboard and the clarinet, and I can see how it's using multiple different types of mediums at the same time." Geoff indicates that multimodal composition allows for "more creative freedom to do what you want, whether it be with a visual element or an auditory element or anything like that. It allows a lot more creativity and a lot more character to be put into it, and I think that's more effective at making a point or driving a point across or getting a message across." Throughout our meetings, as this chapter reveals, the participants all discussed multimodal composition in terms of creativity at some point, especially art or music as a metaphor for multimodal composing processes; however, Phoebe and Pabla define multimodal composition explicitly via creativity and aesthetics.

Also writing about student responses to the concept of creativity, Bartholomae, in "Inventing the University," posits that these writers locate themselves and their experiences "in relation to the commonplace (creativity is unique expression; it is not having to conform to rules or guidelines) regardless of whether it is true or not. . . . It is the power of the commonplace (its truth as a recognizable and, the [students believe], as a final statement) that justifies the example" (13–14). The students in this case study value the creativity of multimodal composition because it seemingly resists the

traditional rules and guidelines of writing: "The example, in other words, has value because it stands within the field of commonplace" (14). Zara conceives of the concept as a "mix of ways to appease to the five senses using various forms and then how you express yourself to another person no matter what the form is." Like Zara's conception, Amelia's definition is sensorial and straightforward: "Presenting information in multiple forms. Multiple senses is always how I think of it too. . . . I was expecting it would help me create more and communicate better, and it definitely does. It kickstarts my creativity a lot when I'm forced to make a multi, multi, multimodal project. I enjoy it." Zara and Amelia's definitions share commonalities with the previous participants; however, their understanding of multimodal composition involves the senses, evincing processes of psychological intermodality.

3.3 Psychological Intermodality

Psychological intermodality is a multidisciplinary concept originating in the field of Experimental Child Psychology. In "The development of intermodal emotion perception from bodies and voices," Zieber et al. argue that "intermodal matching indicates a level of knowledge about affect that goes beyond simple discrimination of modality-specific features and indicates a sensitivity to common affective information in expressions from different modalities such as faces, voices, and bodies" (69). The field should draw on this research in childhood psychology because it stands as evidence that our communicative processes are always already intermodal: multiple "studies have shown that infants perceive emotion from faces and voices during their first year of life" (69). Employing their research as a foundation like NLG does with semiotics, we can expand on this multidisciplinary knowledge to study intermodal composition.

Pabla's multimodal experiences with her family members exemplify the intermodal matching that Zieber and her colleagues research:

I have younger siblings, and multimodal composition reminds me a lot of communicating with my little brother who is two because kids and babies sometimes they can only communicate certain things in certain ways. It's always interesting trying to figure out what's going on and how you can teach them because they are constantly learning. And I think communicating with them in multimodal ways and actively trying to explore how you can communicate is something we lose as we grow up.

Although she is not cognizant of Zieber et al.'s theory of intermodal matching, Pabla's multimodal communication with her younger siblings depends on this ability to engage in psychological intermodality to decode meaning. In adulthood, as Pabla mentions, we become dependent on specific intermodal pathways for everyday communication, and social habits coerce us to stop seeking alternative communicative paths across modalities. Perhaps children, especially babies, are even more dependent on psychological intermodality because they are limited by their developing senses.

When verbalizing mental functions like writing and reading, as discussed in the first chapter, people often employ metaphors that reveal details about how their cognitive processes transform mentality into materiality or vice versa. These usage metaphors are frequently multisensory, illuminating the cognitive overlap among modalities. Psychological intermodality embodies this subconscious, cognitive process we use constantly to decode and encode sensorial data. As a marketing student, Geoff discusses multimodality as a method to interpret the deluge of messages he encounters daily and make meaning in such an environment as a future marketer. "It's super

psychological," he says, "using multiple modalities to engage. It's crazy how influenced we are." Geoff references podcasts as an example of multimodal composition, saying "with most podcasts, when they're editing it, they just kind of slam their hands on the equalizer, and then the bass goes way up. And the treble goes way down, and the person sounds like a blanket as a voice." With this multisensory metaphor, Geoff transmits his understanding of dissonance, which is a sonic concept, using spatiality. He also utilizes the metaphor of visualization: "I visualize what they're talking about like I'm reading a book, but I don't envision two people having a conversation. . . . I can't listen to music without imagining a live show or the light shows that would go along with it. That's how it works for me." Psychological, intermodal processes enable podcast composers to layer their compositions with multimodal meaning as they switch between modalities to draft and record, and audience members like Geoff use the same mental processes to decode that meaning. While Geoff's example discusses multimodal listening, demonstrating the psychological processes of intermodality, the following example reveals how writers can utilize this concept for multimodal composing.

Valery also employs visualization as a multisensory metaphor to understand sonic meaning, saying, "I love incorporating music into my drawings and writings. Whenever I hear music, I always think of a story that goes along with it." In this case, she employs aurality as inspiration to transfer sonic meaning to her visual and alphabetic projects and uses the idea of an alphabetic narrative to decode sonic meaning. This situation involves psychological intermodality because she is not consciously selecting facets of the music to include in her work even though she is aware of some meaningful transfer across modalities; if she did consciously include parts of the music in her visual or alphabetic work, then this part of her composing process

would also be operationally intermodal. Clearly, the metaphor of visualization can serve as an intermodal platform for sonic composition as characterized in Geoff and Valery's multimodal experiences; conversely, aurality can serve as an intermodal platform for visualization. For example, Valery utilized her intermodal process for multimodal assignments in her first-year-composition class:

I remember one of my very first English projects this semester was to look at a picture. My professor made the theme about video games. Our very first project was to look at pictures and figure out what they're trying to argue in advertisements, so I chose a "Got Milk?" ad with Mario in it. I was not feeling it because I felt very unmotivated, so I listened to a lot of Mario soundtracks to get me motivated. And that really helped me a lot to be fair.

Valery's intermodal process for visual analysis provides another glimpse of the psychological overlap among modalities. "My favorite part of writing," she says, "is that I visualize what's going on inside of my mind. Even though I can visualize it, I can't write it down exactly. . . . Visualization is my number one thing to help me figure out what I need to do because when I visualize, I think of a box and different puzzle pieces in the box." For Valery, visualization is not merely a metaphor but also a mental, spatial construct she uses to unpack and respond to rhetorical situations, a multisensory puzzle to be sorted and solved. Although nothing musical appears in her written analysis, she admits that listening to soundtracks from various Super Mario games provided necessary motivation to complete the project. This process serves as an intermodal heuristic that helps her move beyond writer's block: without this music, she seems to believe that her analysis would be something else entirely.

Several participants cite music and other audio as vital to their critical reading and traditional composing processes. "If I can read alone with listening to music," Amelia says, "that's how I really thrive with learning." Geoff admittedly does not like reading longform texts, so he utilizes a speech synthesizer to "have [his] laptop read to [him] while [he does] something else like cook." He puts on "something to listen to when [he writes] or when [he's] trying to focus on anything that has to do with academics or anything that requires some sort of mental capacity. [He] can't listen to music because [he'll] start getting distracted." During this focus group conversation, Phoebe responded to Geoff: "I'm the opposite." Geoff seemed surprised, saying, "Oh really? I listen to podcasts. . . . I need someone talking. . . . I like a YouTube video or something like that: just noise of people talking." Distraction is an interesting concept within this study as characterized in Geoff and Phoebe's experiences. He cites distraction as a problem, whereas Phoebe says distractions are necessary to her writing process. When she is writing, Phoebe has "to have the news on, only the news. It has to be muted, but [she] can still see it. [She] can still read everything that's going on. Then, [she has] music playing, and it has to have lyrics. It can't just be instrumental, and then [she] can get work done. But if [she doesn't] have those two other distractions going on, [she's] the most unproductive person."

This delineation of certain ambiences for specific compositional tasks is a concept several participants mention throughout this case study. Unlike Phoebe's preference for music with lyrics, Dawn needs "something that isn't going to make [her] mind wander with a bunch of crazy lyrics." Dawn continues the discussion of aurality by sharing her experiences writing for exams:

I have online exams where they proctor you online at home. There's no one there. Right? Sometimes, it's too quiet, and I need a little noise. I wish I could turn the music on. I can't turn the music on, so I'm making my own sound by reading the question out loud. I didn't realize you couldn't, so I got in trouble. . . . It's just too quiet. It's eerily quiet, so it's distracting.

In this case, Dawn uses her body to make sound to moderate her distractingly quiet environment; however, the structure of this rhetorical situation prohibits the sonic catalyst for her writing process, limiting her ability to depend on existing mental models for production. Zara has a similar approach to writing; she says, "I write a lot. I write poetry. I like writing stories. I like listening to music while doing it because that really sets the mood for me. Sometimes, I do little doodles so that I can visualize what exactly my character is feeling and what exactly I am feeling. It helps a lot in terms of how I can bring out all these emotions in me." Like Geoff and Valery, Zara utilizes visualization as an intermodal platform for multimodal composition, and she uses aurality to draw out emotions for content creation.

The metaphor of visualization can be a useful construct of psychological intermodality, but it is not helpful to everyone. Phoebe and Pabla's experiences characterize this divide. Phoebe has "to visualize things in [her] mind. Even with Photoshop for example, [she] was working on a promo piece, and [she] knew exactly what [she] wanted it to look like. [She] had to make sure when [she] conveyed that, it wasn't perfect until it matched [her] complete mental vision." Pabla's process is completely different; she indicates that "visualization is a kind of hindrance. It's harmful for [her] to visualize something in this really fantastic way that [she wants] it, and it's more helpful for [her] to forget what [she wants] it to look like or what [she imagines] it

would look like and start doing something." Phoebe depends on visualization for her creative process, whereas Pabla rejects it as a hindrance: this division exposes a need for a multifaceted, intermodal design for multimodal composition pedagogy.

Beyond serving as a heuristic for inspiration or visualization, psychological intermodality also involves dissonance or unwanted auditory input. Valery, for example, lives at the top of a three-story house with her parents who generally occupy the first and second floors:

We're . . . in the farthest corners of the house. [Mom's] volume is really low on the TV, and my dad is a Vietnamese man who loves to watch Asian flicks. When I'm working on something, I can't handle sound because it's at night, and I hear almost everything. So I go to my parents and ask them if they can lower the volume, and they can't turn it any lower without losing all sound. When it's super quiet, I can't help but twitch my body to keep myself engaged.

Valery's problem is twofold. Too much unwanted sound creates a dissonant distraction that prevents her productivity, but the sound of silence yields the same effect. Even if her parents could mitigate the noise from their media, it seems that being quiet would not help Valery's creative process. Like Dawn with her exams, Valery uses her body to moderate her distracting environment. She complicates this story by saying, "I can't write while listening to music, but when I'm listening to music, I think of all the ideas I want in my mind. So music to me is my creative-productive side. . . . If I'm writing, I need to turn it off and throw all my electronics out; otherwise, they're going to seduce me back into the void of media." Valery's narrative complicates the concept of psychological intermodality because it illustrates how her mental resources are

beholden to the soundscape of her workspace. She has no control over the subconscious way aurality affects her creativity.

While psychological intermodality involves subconscious usage, operational intermodality represents the conscious usage of overlapping modalities to make meaning: when a multimodal composer like Zara, for example, listens to Mario-themed music to produce a visual analysis, the process involves both psychological and operational intermodality. The music has a subconscious effect on the final project's meaning, but the conscious act of writing a visual analysis is operationally intermodal. Furthermore, among these three categories of situated intermodality, psychological and operational overlap the most in this study's primary data, and the next chapter explores this psychological-operational intersection for composition specifically.

3.4 Operational Intermodality

The field's conception of multimodal composing as an active verb fits effectively in the category of operational intermodality. When we encourage students to compose multimodally, we are asking them to engage in operational intermodality. Throughout our meetings, the participants shared many multimodal experiences, including academic choices and personal preferences for multimodality. This section expands on participants' definitions of multimodal composition to explore how they deploy the concept in their writing processes and daily lives.

I posit that operational intermodality encompasses all communicative acts, especially multimodal composition; in fact, talking to oneself is an effective metaphor for operational intermodality because it compares how both processes depend on the interconnectivity of modalities. Engaging the sonic, visual, alphabetic, gestural, spatial,

and personal modalities for composition requires writers to employ a multisensory focus on constantly moving processes, and the following data provide evidence to support this operational categorization. The research narrative I offer in this section uncovers how these students feel about using multimodality to communicate in academic settings, vernacular exchanges, and everyday environments. By remixing these conversations, I seek to capture these intermodal, operational moments and remediate them in this alphabetic space.

With their newfound understanding of multimodal composition, the participants recognize the presence of multimodality throughout their previous academic experiences. Dawn "had to develop interactive training sessions where they would learn with the PowerPoint, which incorporated videos and clip art. You interact with the students, and you teach them things and quiz them. [She thinks] all of that would be multimodal, although [she] didn't think that at the time." Valery says, "I feel like almost every activity you do in academic classes like projects and stuff: almost everything is multimodal. Right now, I'm doing a multimodal project. I am actually creating a video game." Without using this terminology, she indicates an understanding that communication is always already multimodal even though some of her previous responses are beholden to the print paradigm. "Basically, I'm implementing sound and also the effects of visuals," she continues, "I want to prove my point that sound is very important, so I'm doing different mixes of visual, sonic, and alphabetic because I'm also putting in dialogue at the same time. Also, it's spatial because it's in the Web taking up space." Although sound is her focus, she recognizes the interconnectivity and fluidity of other modalities within her project. Geoff makes a similar move:

This semester, actually, I had a choice from a whole trove of things, but I chose to do a video essay because I find them really effective. And, obviously, that would combine an auditory element—the communication of speaking over text, which would be the alphabetic portion and then visuals like pictures, video clips, and all this stuff: all these creative endeavors come together to reinforce the point I was trying to make.

Geoff's project is primarily visual, but like Valery, he understands the importance of overlapping modalities to his composing process. In this passage, he takes us through this process of operational intermodality by discussing his multimodal choices and how his thinking takes shape throughout production.

Maggie and Phoebe offer presentations as academic experiences with multimodal composition. "I've been having to do a lot of presentations recently," Maggie recalls, "so I feel like I've used it quite a bit because I have to do visual elements. . . . I'm not going to want a bunch of words on my screen as I'm trying to show them something. It depends on your audience, what you're trying to portray, and how you're trying to engage them." Her approach to multimodality in academic projects is clearly rhetorical. Multimodal composition represents her available means of persuasion, and Maggie chooses carefully with her audience in mind. Phoebe indicates a rhetorical approach to presentation as well, saying, "if I'm doing a presentation in class in front of a bunch of college kids, they are not going to care about having something physical to touch. They're just like, 'I'm here to be here, so show me a video or make me laugh maybe. And I'm out!' So I think it depends on the audience." The audiences in compulsory composition courses can be hostile because they have no choice but to be there, and Phoebe understands this harsh reality. She provides an example from her experiences:

I had to do a presentation this morning in my English class, and I had The Great Pacific garbage patch. I think people were expecting the same old boring speech about pollution: something they've heard a million times. I wanted to make sure that the way I brought it across was interesting. I made sure that if I wanted to include fun facts, I had some sort of graphic transition going into the fun fact so that it was a little bit more captivating with ocean waves playing in the background the whole time with plastic sounds effects.

Phoebe utilizes the rhetorics of expectation to forecast what her audience does not want to hear or see and takes an alternative path for multimodal presentation. "We love the scenic sound of the ocean," she adds, "but in all reality, this is what it's sounding like at the rate we're going. . . . For the video I showed, instead of it being a realistic documentary kind of vibe, it was more of a graphic representation." Presentations, like traditional essays, are a standard feature of the academic experience and ideal spaces for experimenting with operational intermodality.

Zara, Pabla, and Phoebe mention language courses as academic experiences with multimodal composition. Zara "had an exam in Malaysia, so [her] history teacher made [them] a song about the various Chinese eras and had [them] sing it over and over again to memorize it." For Pabla, "every single language class that [she's] ever taken in college has been multimodal throughout learning the language and the projects. [They] always have to make a skit in [her] Chinese class, and [they] have to perform it and tape it. Sometimes, [they] mess up and have to record on top of that." She specifies that this process of "messing with a different mode," which is operationally intermodal, helps her learn more about the language because it alerts her when "listening comprehension is

really bad." Via her understanding of multimodality, Phoebe, like Pabla, had the same realization about language courses: "I took Spanish in sixth grade all the way until my senior year in high school, and every single project we did was multimodal. We'd take the vocabulary from that unit and use it to make a script or some kind of show, and we'd always have to record it. . . . We'd show it to the class, and . . . we would have subtitles of the Spanish translation." Both Pabla and Phoebe report that this multimodal approach to language acquisition helped with memory.

The primary data for this case study also reveal everyday applications of multimodal theory to forms of composition beyond writing and speech, providing additional evidence of operational intermodality. Admittedly an artistic individual, Valery applies the concept to her creative projects beyond the classroom and reports that the practice bolsters her academic endeavors with multimodality. "I'm Vietnamese American," Valery says, "and I'm also Catholic at the same time. We Vietnamese like to do festivals with formal dances. We always have to do gestures of what's going on in the dance and interpret the meanings and what's going on at the same time. I guess we do it to bring out that Vietnamese vibe to bring back our culture in America." In this example, she applies academic theory to her rich heritage of choreography, which she identifies as primarily gestural, albeit multimodal, composition. Her response gives readers another example of operational intermodality with her discussion of interpreting gestural meaning in time and space. Zara considers multimodality with a gestural focus important to her culture as well:

I was thinking about talking in another language because I'm bilingual, so I gesture even more when I'm speaking Mandarin because I know I have an accent. I try to gesture to make sure that it's easier to convey. In the

country I come from, Malaysia, we mix three languages together when we talk. Everyone mixes all the English words together. They gesture even more.

Zara has a mental advantage for operational intermodality because she is accustomed to remixing communicative modalities in her daily life. She understands that modalities share a commonality of expression because her community utilizes gesture to mitigate the blending of multiple languages and modes for vocal delivery. According to Zara, social media provide additional examples of this phenomenon. She indicates "you can see it in their memes and stuff. You see them drawing from different cultures too." Of all the participants, Valery and Zara seem to embrace multimodality the most, especially in their daily lives. Perhaps their transnational experience or multilingual nature affords them unique communicative perspectives.

Arguing for a frequently overlooked modality, Pabla applies the theory of multimodality to the visual and performing arts:

A modality that I think that a lot of people tend to ignore, which can be very harmful if you ignore accidentally or completely, is gestural, especially when you're acting in theatre or film. If your gestures or body language don't match the way you're supposed to be feeling, then it disrupts the suspension of disbelief, and the audience doesn't believe that you're going through it because your body language doesn't match. And if you're giving a presentation and your gestures are all over the place, they can be really distracting.

In this case, Pabla is discussing what happens when an actor or presenter utilizes operational intermodality that is not rhetorically effective. Theatergoers and film

enthusiasts depend on intermodal perception to sustain their willing suspension of disbelief, and ineffective multimodal appeals disrupt this process; likewise, audience members at public speaking events become distracted when a presenter has wandering hands or nervous feet, failing to achieve the audience's intermodal expectations.

As a bodybuilder and musician, Amelia utilizes the theory of multimodality in her daily life. She composes videos to assist her strength-training sessions. "I work out a lot," she says, "so just thinking of the weight-lifting with the gestural and spatial. I have to take videos to make sure my form is right. . . . It's even sonic. I do a lot of jumping, and I have to make sure my feet hit the ground at the right time. When I hear my feet hit, I have to make sure my arms are up." I asked if her training or video would be successful without the interconnectivity and fluidity of these modalities, and she indicated they would not, saying, "when I'm jumping and I see in the mirror that I landed in the right spot, but I heard where my feet hit or my arms were in the wrong spot. Even though it looked right and I landed in the right way spatially, it was not right because I could hear it." She also relates to multimodality through music: "When I'm practicing drumming for time at home or listening to the metronome, if I watch when the stick hits or listen to the click, I'll get off. I almost have to cut out the visual and listen to—if my stick's hitting and my metronome's hitting, this is good. If I try and look, it's harder to me." This notion of embodying multimodality for musical practice is an interesting example of operational intermodality because it shifts the focus to the body, instead of the mind, as a platform for multisensory discovery.

The psychological-operational processes of intermodality are internal, belonging to the realm of an individual's mind, but when those cognitive actions are made material whether printed, tangible, digital, remixed, or hybrid, they become an external

manifestation of intermodality (e.g. writing). In *Toward a Composition Made Whole*, Shipka argues that "whether our courses or research interests focus on what we term *writing, digital or new media writing, multimodality, communication, or composition*, we need, following those who advocated a communications approach to first-year English, to treat those interests as content *and* as a dynamic act or process" (31). The taxonomy I advance in this chapter directly addresses this call from Shipka by situating intermodality as at once material (content or products) and psychological-operational (dynamic acts or processes).

3.5 Material Intermodality

The field's conception of multimodal composition as a noun fits nicely into the category of material intermodality. When we petition students to create a multimodal composition, we are asking them to craft material intermodality. Like Shipka,

I am also aware of how writing on shirts, purses, and shoes, repurposing games, staging live performances, producing complex multipart rhetorical events, or asking students to account for the choices they make while designing linear, thesis-driven, print-based texts can also broaden connections of composing and greatly impact the way students write, read, and perhaps most importantly, respond to a much wider variety of communicative technologies—both new and not so new." (9)

Shipka's call for the inclusion of material objects as products of multimodal composition serves as the inspiration for material intermodality; however, I go farther to include digital culture in this category because we access the digital through material means such as screens, speakers, and printers and, likewise, create and access print documents

using digital devices. This categorization resists the field's pro-digital tendencies by recasting the products of multimodal composition as material intermodality, which may be printed, tangible, digital, remixed, or hybrid. When students compose multimodally, they materialize their psychological-operational processes, transforming thought and action into a product.

Valery and Geoff provide excellent examples of the intermodal nature of materiality. Valery says, "[w]hen it comes to text writing, you're writing words to fill in the space in your mind. . . . You're writing all you can to help someone understand what's going on and fill that gap in their mind to understand what you're saying and what your argument is or what the mode of the story is." Text is the medium for her writing, but she is aware of the intermodal transfer between her mind and the reader's. Geoff indicates that his rhetorical delivery depends on the medium, saying, "if it's a presentation, I'm going to focus a lot more on my physical body occupying space on stage along with my voice and that sort of stuff. It's different if it's what I would consider to be a detached form of multimodal composition where you're not directly interacting with someone—where there's a medium between you and the audience." His detached form of multimodal composition is a consideration of material intermodality because the medium that exists between him and his audience affects the message's delivery and its reception.

Phoebe suggests that project requirements for materiality or delivery can even serve as a limitation to her composing process:

My least favorite experiences with multimodal composition involve times when I've been given a rubric and I have to follow these exact visuals or auditory devices in order to bring my presentation across—versus just saying, "hey, make a multimodal composition, whatever that means to you or whatever you feel is the best way." I like having more of a creative range in doing things.

In this case, her instructor has limited her intermodal perception by separating the overlapping modalities into discrete categories. As I argue in chapter 1, this pedagogical separation is useful for introducing the modalities to students, but it does not account for how the human mind and senses operate. Teachers may have sound pedagogical reasons for separating the senses or modalities for any given project, but we should be aware of the ways that such a move could limit students' composing processes.

I designed this phase of the research process so that participants could materialize their multimodal writing processes for intermodal analysis and to provide readers with print and digital artifacts that illustrate the hybrid nature of intermodality. For this section, as I describe in the previous chapter, I curated an exhibit of material intermodality with students' multimodal writing samples and literacy narratives to connect the local (GSU) to the global (DALN) and "to slow down my reading, listening, and viewing . . . in such depth that I could 'see' what was happening" (Bloome). This multimodal exhibit is hybrid by design to demonstrate the fluid, interconnected nature of material intermodality: local, paper artifacts from the composition tradition and global, digital artifacts from the literacy tradition.

3.5.1 Part I: Multimodal Writing Samples

Immediately after our one-on-one interviews, I asked participants to compose a short, multimodal message with at least two of the provided modalities (visual, sonic, alphabetic, spatial, gestural, and personal), using only pencil or pen and a white sheet of

paper. I also asked them to mark which modalities they engaged. This part of the exhibit features their responses and a brief intermodal description.



Figure 3.1 Pabla's Multimodal Writing Sample

Pabla reports using visual, sonic, alphabetic, and spatial composition in this design. As she mentioned in a previous section, Pabla had presented on The Great Pacific garbage patch earlier that morning, so the message was fresh in her mind. Her title, "The Sad Future," utilizes a copyediting mark to highlight "Sad" as an important addition. Although her design features only one large, borderless panel (i.e. splash page), she utilizes the visual-spatial language of comics as the primary discourse with its tradition of alphabetic and sonic representation. She enjoins words and audio using onomatopoeias within scallop-edged text boxes, one of the hallmark audio-visual cues in

comics. Pabla admitted that this artifact shares some commonalities with her class presentation: the sounds of trash pollute and the ocean's ambience. Her message also depends on the size of the garbage patch, which she characterizes with the spatiality of a graph using lined arrows and the alphabetic modality.

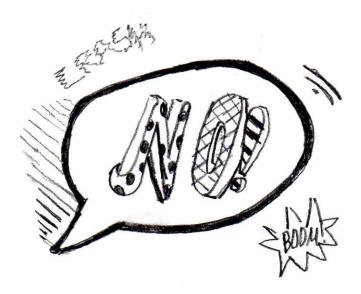


Figure 3.2 Geoff's Multimodal Writing Sample

Geoff reports using visual, sonic, alphabetic, spatial, and personal composition in this design. He also plays with the audio-visual language of comics, but his design zooms in closer to feature one speech balloon and two onomatopoeia. To appreciate this design fully, it is important to note Geoff's playful approach to this message. Many of his answers are sarcastic and comical by design, and this writing sample is no different. I asked him if this message was a tongue-in-cheek answer to the prompt, and he offered only a mischievous smile. For the sound effects, he encases "boom" in a visually

explosive frame, whereas "crash" features a squiggly font to mimic movement and sonic expression. Geoff also utilizes line drawings to indicate spatial movement.

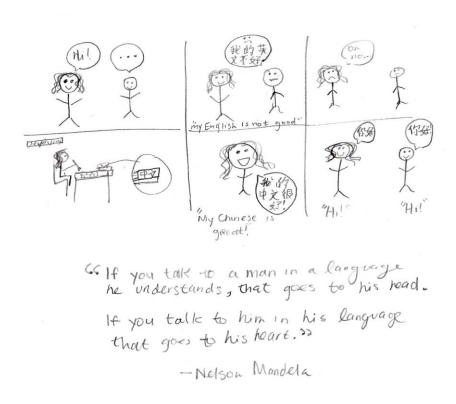


Figure 3.3: Pabla's Multimodal Writing Sample

Pabla reports using all the provided modalities in this design: visual, sonic, alphabetic, spatial, gestural, and personal composition. She zooms out to a farther perspective than the previous two comics. The comic's first six panels feature a narrative, and the final, borderless panel contains a Nelson Mandela quotation that strengthens her message. Pabla's comic reflects on her answers from our time together, featuring her bilingual status and transnational experiences with multimodality: she utilizes alphabetic composition in Chinese and English to make her point. Pabla also carefully chooses facial expressions for each panel as gestural composition.

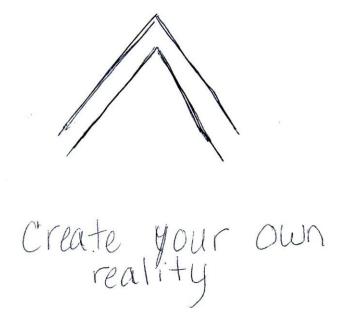


Figure 3.4: Amelia's Multimodal Writing Sample

Amelia reports using visual, alphabetic, spatial, and personal composition in this design. At first glance, the graphic seems like a simple line drawing with accompanying text; however, Amelia explained afterward that it features one message in two ways.

Tattoo culture attributes the line drawing to the Vikings, translating the symbol as "create your own reality"; however, for the record, these origins are in dispute. Despite this situation, the meaning has taken shape within popular culture as a tattoo design.

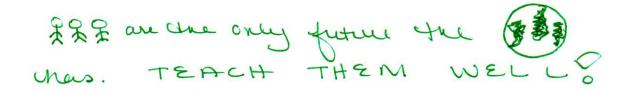


Figure 3.5: Dawn's Multimodal Writing Sample

Dawn reports using visual, alphabetic, spatial, and gestural composition in this design. She reminded me during this phase that she is not artistic and asked if she could make a doodle. Composed entirely in green ink, her final product is a rebus, which utilizes pictures in the place of some words. Interestingly, rebus rhymes and stories are common in children's entertainment and education, and many of Dawn's answers in the focus group and interview focused on teaching her daughter how to spell her own name using multimodality. Because the first picture could be read multiple ways, I asked her to translate the message for clarity: "Children are the only future the Earth has. TEACH THEM WELL!" Even though her message is paper-based, we can read the second sentence using the sonic-alphabetic rhetorics of social media, wherein all-caps indicate screaming. The rebus is inherently intermodal because it requires a visual-alphabetic-spatial translation process to decode the overlapping modalities.

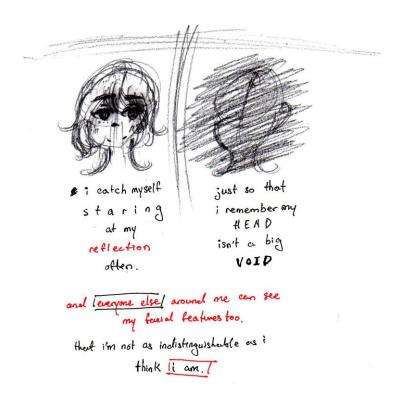


Figure 3.6: Zara's Multimodal Writing Sample

Zara reports using visual, alphabetic, spatial, gestural, and personal composition in this design. Her message is much more personal and internal. She uses the spatial-visual language of line drawing to divide the facial gestures and some of the alphabetic text: "everyone else" and "i am." She also utilizes red ink to set off certain alphabetic elements: "reflection"; "and everyone else around me can see my facial features too"; and "i am." The first facial gesture is obviously pensive, whereas the second one is shaded to connote internal emotionality. Zara chooses not to capitalize the letter "I," which also could be an emotional expression.

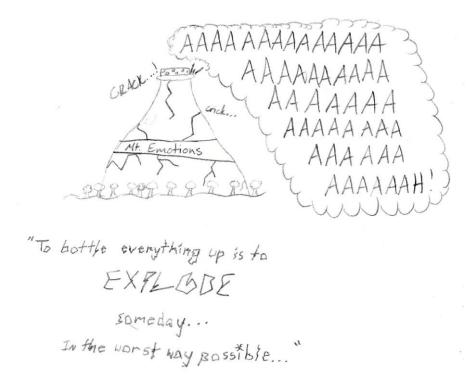


Figure 3.7: Valery's Multimodal Writing Sample

Valery reports using all the provided modalities in this design: visual, sonic, alphabetic, spatial, gestural, and personal composition. Her message is clearly pathosbased. The focal point is "Mt. Emotions": a visual metaphor that is simultaneously representative of a volcano and breaking bottle. For the volcano, she uses line drawing to connote a horizon with trees at the base of the mountain; for the bottle, she uses line drawings and onomatopoeia to connote corked glass under pressure. The scalloped speech balloon and shaky text ensure that her visual message is clear.

3.5.2 Part II: Multimodal Literacy Narratives

As mentioned in the previous chapter, I look to the archives to connect the literacy of the local to the global and to honor the legacy of NLG's pedagogy of

multiliteracies. This part of the exhibit features video literacy narratives as material intermodality. Like the multimodal writing samples, these videos capture temporality to remediate cognition (psychological and operational intermodality) into another medium (material intermodality). While hosting videos in this space is impossible, I offer a still frame from the narratives with a searchable title and brief intermodal description and encourage readers to watch the original content at the Digital Archive of Literacy Narratives: www.thedaln.org.



Figure 3.8: "I M A Literate" by Irene Taylor

Irene Taylor's "I M A Literate" is a product of visual, sonic, alphabetic, spatial, gestural, and personal composition. Before the title frame, dictionary quotes of "literacy" and "visual literacy" scroll vertically across the screen. Irene narrates the video in her own voice, engaging the audience through personal aurality. With animated transitions and background photos, she moves through her multifaceted literate identities in the first section: "I am a daughter . . . sister . . . child . . . high school graduate . . . university graduate . . . secretary . . . non-traditional student . . . writer." The second section continues this multimodal ethos to contextualize her literacy acquisition through typing and shorthand. Most of the background photos are personal.

The third section contains familiar vertically scrolling text like the introduction: "Writing is an athletic activity. It comes from the whole body, your knees and arms, kidneys, liver, fingers, teeth, lungs, spine—all organs and body parts leaning in with you, hovering in concentration over the page. *Old Friends from Far Away*, Natalie Goldberg. Free Press. 2007." The fourth section features Irene as a talking head as she concludes her thoughts with gratitude for the audience. The final frame features a musical track and photo of her mother with this quotation: "Dedicated to Nelle G. Taylor, daughter, sister, wife, mother, 1909–2005."



Figure 3.9: "This I Compose" by Sarah Harrington

Sarah Harrington's "This I Compose" is a product of visual, sonic, alphabetic, spatial, gestural, and personal composition. The title frame spatially introduces alphabetic text, one letter at a time, via stop-motion animation. The next scene features a clip of Cynthia L. Selfe from a pedagogical video, saying, "your essay is due tomorrow. Don't be late. Your grade goes down if your essay is late: due tomorrow by noon." A close-up of presumably Sarah's mouth appears shortly before blowing into the microphone, breaking the fourth wall. An uplifting musical track begins to play as images and video clips of collegiate daily life pan across the screen. Sarah narrates the

video in her own voice: "Being an average college student, I almost always feel overwhelmed. . . . One way that I've found to calm all these nerves is through creating a relic that will be passed down through my family, hopefully for years." At this point, the video clips change to feature her scrapbooking process. "Since freshman year of high school, I have learned how to channel my creativity into creating these timeless books where I can store adventures that I've gone through." The video clips shift to travel experiences but switch back to the scrapbook intermittently. "These lessons and ideas I picked up throughout my travels," she says, "have been forever stuck in the laminated pages of my mind." This multisensory metaphor makes clear that Sarah's scrapbook is a visual-spatial representation of her mentality. The video ends with the scrapbook closing and another close-up of her mouth, but this time it is smiling.



Figure 3.10: "Video Games and Their Effects" by Drew Doherty

Drew Doherty's "Video Games and Their Effects" is a product of visual, sonic, alphabetic, and spatial composition. The title frame introduces a video clip of game content, taking the perspective underneath the waves into the underwater world of Rapture from *Bioshock*. The original video's sounds play as Drew's voiceover shares a message about the literacy of video games: "video games offer more benefits than most people realize. They teach us patience. They teach us focus and problem-solving skills,

and they teach us how to work with other people to reach a common goal." Between these sentences, the video content shifts to offer illustrations. After this section, in a surprising move, the archived video begins to discuss the archive itself and offers video clips of other digital literacy narratives about video games. The remainder of the narrative borrows content from trailers and actual gameplay. Before the credits, the final frame contains a message seemingly written with a finger on foggy glass: "We Will Be Reborn."



Figure 3.11: "There and Back Again" by Merideth Garcia

Merideth Garcia's "There and Back Again" is a product of visual, sonic, alphabetic, spatial, and personal composition. There is no voiceover or title frame. Instead, the video begins with fantasy music and alphabetic text: "My Literacy has a Sound... a Look... a Feeling." Between these frames, the background images shift to offer illustrations from *The Hobbit*. In the second section, the music changes to liturgy, and the content changes to feature a typed literacy narrative scrolling in chunks over background images. She has a lifelong love of reading books that have movies and watching movies that have books. The third section contains talking-head styled interviews with her children about sharing literacy before a familiar transition to the

final section: "My Literacy is a Shared Journey." The video scrolls through pictures of family and personal artifacts that illustrate her shared experiences before indicating that this video is yet another shared journey with the audience.



Figure 3.12: "Being Funny for Strangers" by Dane Lale

Dane Lale's "Being Funny for Strangers" is a product of visual, sonic, spatial, gestural, and personal composition. This digital literacy narrative is unique to the archive because Dane tells his story with a puppet show, which is arguably multimodal. He utilizes voiceover and sound effects to transmit this tale of becoming a stand-up comedian: "As I grew up, I found new ways to make people laugh. I developed an instinct for what might catch them off guard to delight them with the unexpected and bizarre." He begins the tale with accidental comedy in childhood and culminates in his first stand-up experience in adulthood, saying, "all I had to do was build an act." He stages the sections like theatrical scenes with puppets made from spoons and various elements that serve as curtains and props.

Material intermodality is the product of multimodal composition, a moment in time captured through the overlapping modalities of visual, sonic, alphabetic, spatial, gestural, and personal composition. Taken together, the multimodal writing samples and literacy narratives in this exhibit represent intermodal meaning that subjects materialized in a creative moment via interconnected acts of composition.

3.6 Situated Intermodality

Reading students' multimodal experiences as situated intermodality reveals the multisensory nature of composition. Even the traditional academic essay, which the field already defines as inherently multimodal, requires a writer to engage more than one modality. Alexander and Rhodes posit that with "our push to assert our own disciplinarity, we have perhaps privileged text-based forms of writing to the extent that we rarely address the specific invention, delivery, and rhetorical possibilities of other types of composition in our classes" (5). As this study's participants intimate, many writers utilize situated intermodality to engage multiple modalities for essayistic composition even though the final product is ostensibly alphabetic.

The focus groups, follow-up interviews, multimodal writing samples, and digital literacy narratives in this chapter feature student voices because they are the audiences of multimodal composition pedagogy, which descends from the NLG's pedagogy of multiliteracies. Student populations are rarely the subjects of academic inquiry but are necessary for the study of intermodal composition because they inhabit our current pedagogical moment, and I offer my reading of these experiences—situated intermodality—as an interpretation for the field. As I argue in this chapter's introduction, mine is not *the way* but *a way* to interpret what students report about their feelings about composition in this moment; nevertheless, it is beyond time for us to listen to what they have to say.

These student experiences partially verify the efficacy of multimodal composition's introductory lessons; however, the communicative realities of our current moment, which include the multimodality myth, require an updated pedagogical framework. Chapter 4 remixes the academic conversation about multimodal

composition with intermodality to analyze primary research from this case study and offer recommendations for such a framework so that administrators and teacher-researchers in Rhetoric, Composition, and Literacy Studies can address overlapping, hybrid modalities (e.g. audio-visual) as well as the multimodality myth in their work with students.

4 ALWAYS ALREADY INTERMODAL: REDIRECTING THE MULTIMODALITY MYTH

As I argue in the previous chapter, contemporary multimodal composition pedagogies are effective for introducing multimodality to students, but the multimodality myth presents obstacles and traps that distract from the valuable lessons multimodal composition has to offer the field; however, listening to students of these pedagogies and situating intermodality into a taxonomy of the psychological, operational, and material allows us to address the communicative realities of our current pedagogical moment. Bartholomae, in "Inventing the University," offers a method for reframing student experiences as worthwhile data, which I take up in this chapter to explore the multimodality myth: he argues that when students sit "down to write for us, [they have] to invent the university for the occasion—invent the university, that is, or a branch of it, like History or Anthropology or Economics or English" (4). This decades-old position applies throughout contemporary academic conversations about NLG's pedagogy of multiliteracies and Rhetoric and Composition's pedagogy of multimodal composition because students must reinvent their disciplinary understanding of Literacy Studies or English using multimodality. Like Bartholomae, "I will be concerned, then, with university discourse in its most generalized form—that is,

as represented by introductory courses—and not with the special conventions required by advanced work in the various disciplines" (12). In this chapter, I will revisit Bartholomae's "Inventing the University," Shaughnessy's *Errors and Expectations: A Guide for the Teacher of Basic Writing*, and Halbritter's *Mics, Cameras, Symbolic Action* alongside primary data from this case study to employ remix as an analytical tool. The purpose of this chapter, therefore, is to harness and redirect the multimodality myth for more progressive ends, posit that multimodal composing processes are always already intermodal, and offer the resulting pedagogical framework for intermodal composition.

To extend Bartholomae's invention metaphor, I argue that when teachers invite students to enter the academic conversations of multimodal composition, their students frequently employ performance strategies to rehearse these disciplinary lessons as if they were seasoned professionals instead of makeshift actors. When students initially encounter the idea of multimodality, for example, in their college classrooms and writing lives, they have "to learn to speak our language, to speak as we do, to try on the peculiar ways of knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community" (Bartholomae 4). Bartholomae's theory of invention makes clear that students have no choice but to use performance in place of specialization when lessons require proficiencies they have yet to acquire. Consequently, novice writers begin formulating their own theories of composition and multimodality based on how these concepts fit within their own experiences and expectations, which is why student feedback is valid and the subject of this case study: pedagogy is not a one-sided endeavor.

Beyond the visualization and dramatization of the initial lesson, our students must also invent the university every time we ask them to compose multimodally, especially if projects require them to craft rhetorical arguments using an unfamiliar modality; like Bartholomae argues, there is "a necessary and enabling fiction at work here as the [students dramatize their] experience in a 'setting'—the setting required by the discourse—where [they] can speak to us as a companion, a fellow researcher" (6). With the scene set and lines rehearsed, students begin to play their parts to please the show's director and audience (i.e. most students do what they must to receive the best grades possible). They have to "imagine for themselves the privilege of being 'insiders' that is, of being both inside an established and powerful discourse, and of being granted a special right to speak" using sonic, visual, alphabetic, gestural, spatial, and/or personal means (10). With multimodality, the challenge is more intensive because they must position themselves as insiders in discourse as well as practice, trying on not only the vocabulary of professionals but also their design skills. Understandably, this pedagogical process is irregular, creating obstacles that students must overcome through critical thinking and writing, which is admittedly a limitation; however, Bartholomae's timehonored approach is one of the hallmarks of Rhetoric and Composition because it takes on such obstacles with the unapologetic analysis of students' experiences via his theory of invention. The multimodal, compulsory-composition course represents a space where students are especially vulnerable as novice writers, so "I will be concerned with the difficult, and often violent, accommodations that occur when students locate themselves in a discourse that is not 'naturally' or immediately theirs" (12). Perhaps teacherresearchers new to multimodal composition also invent the university as they locate

themselves within this discursive space, which would account for the presence of the multimodality myth in academic conversations.

4.1 Beyond the Multimodality Myth

The multimodality myth spreads believable half-truths and presumptions about digital composition and multimodal composition more generally, creating impossible expectations for students and teachers alike: writers can choose to be multimodal, multimodality is all-digital or everything non-print, and (multi)literacy is either print or digital but never both/and. To identify the myth, we must understand that writers are always already intermodal, incapable of switching off or mentally separating our multimodal means of communication, and building on that knowledge, we can posit that multimodal composition exceeds the digital and that multiliteracies, which directly inform the use of multimodal composition in our field, resist the print/digital binary. As introduced in chapter 1, the myth encourages an instrumentalist, deterministic view of technology that students are merely passive consumers of information, which is connected to the perspective that technological instruction is not the job of humanities professionals (Haas 22; 33). When such technological myths go unchallenged, they ultimately deny students' agency by removing them from the development, critique, and inquiry of technology, which results in problematic definitions that incorrectly inform how participants discuss technological issues and strategize about possible solutions (33). In this section, I review a sampling of collegiate course descriptions, websites, syllabuses, and teaching materials featuring multimodal composition from the field to provide evidence of the multimodality myth in action before redirecting it with my taxonomy of situated intermodality via primary data from this study.

The First-Year Writing Program in the Department of English at the University of Connecticut partially resists the multimodality myth by framing composition as technology, which "need not mean *digital* necessarily. All writing, even alphabetic writing with a pencil and paper, is still a technology, one that has diverse applications and relies on multiple modes. Writing Across Technology invites students and instructors to consider the rhetorical implications of composing with a variety of other technologies as well" ("Writing Across Technology"). Even with the understanding that multimodal composition exceeds digital usage, this program unintentionally exacerbates the myth by setting up a binary between print culture and everything else, othering non-alphabetic meaning into an unequivocal pair with the alphabetic. The Writing Center at Keetering College echoes this usage:

Multimodal assignments have become common in English composition courses across the country. The idea is that, since teachers are asking their students to compose in the new media age, they should allow and encourage them to explore "all the available means of persuasion" (Aristotle). Beyond that, many students will have to present information in their careers or future classes that will require them to move beyond alphabetic text. Multimodal composing gives them the opportunity to develop and practices these skills. ("Multimodal Projects")

This usage characterizes multimodality as something beyond the alphabetic even though its foundational theories—NLG's pedagogy of multiliteracies and Rhetoric and Composition's pedagogy of multimodal composition—purposefully situate linguistic or alphabetic as one of the communicative modalities; therefore, the myth twists the theory out of its original framework. In other words, the alphabetic modality is a significant

part of multimodality, instead of a separate entity: multimodality is not something beyond alphabetic text as the above examples intimate.

Teachers wishing to incorporate multimodal composition in their pedagogies sometimes place an emphasis on technology or new media in the classroom, which can result in an overly digitized focus that completely overlooks materiality. Writing students and teachers encountering such a misleading construct could easily fall into the trap of interpreting multimodal composition as solely digital or literacy as either print or digital instead of both/and at once. The following examples provide evidence of the resulting presumption that multimodal composition is an all-digital endeavor. Resisting this position is significant because doing so affords students more rhetorical possibilities, which is the ostensible aim of pedagogies of multimodal composition.

The Consortium Library of the University of Alaska Anchorage and Alaska Pacific University hosts a website for multimodal resources, including assignments and assessments. In its "Teaching Multimodal Assignments" section, the library offers a bulleted list of two resources that presumes multimodal composition is an all-digital endeavor with no mention of materiality whatsoever:

- Teaching with Multimedia Assignments

 Digital media assignments provide students an opportunity to

 demonstrate their learning of course content through the creation of
 multimedia learning objects using such formats as video, audio, still
 images, and text.
- Thinking about Multimodality

It is fast becoming commonplace that digital composing environments are challenging writing, writing instruction, and basic understandings of the different components of the rhetorical situation (writers, readers, texts) to change. —Takayoshi and Selfe ("Multimodal Composition: Resources for Faculty and Students")

The Sweetland Center for Writing at the University of Michigan makes a similar presumption after arguing that "multimodal composition assignments can offer students valuable learning opportunities, especially when it comes to building rhetorical skills" ("Teaching Multimodal Composition"). What follows is a description of multimodal projects that compares them to printed counterparts: podcasts for rhetorical skills, infographics instead of lab reports and photo essays in lieu of text-based ethnographies—digital artifacts in place of their print alternatives. Such a move is dangerous because it sets a trap for students to consider multimodality as an alternative to materiality, which is a half-truth. An infographic is certainly an alternative to the lab report, but it is neither a replacement nor a direct comparison. Print culture and digital culture, like the modalities themselves, overlap and inform one another: one cannot logically stand in as a replacement for the other.

The Department of Writing and Rhetoric at The University of Mississippi indicates that all its

courses have at least one multimodal component. This page will help you learn more about multimodality, and will include links to videos and how-to guides for using the various digital tools you might want to pursue for your multimodal project. . . . Literally, "multimodal" means more than one mode. For your purposes, that means the process of changing the form of an idea you've written in an essay. ("Multimodal Guide")

Like the previous examples, this department situates multimodality as something beyond traditional composition instead of teaching visitors that the latter is a component of the former, seemingly indicating that students can switch on multimodality for certain projects; furthermore, the site upholds the print/digital binary with the presumption that multimodal composition is synonymous with digital composition, leaving out the possibility for materiality. In this case, students incorrectly learn that what they have written in an essay is not multimodal.

For a more granular perspective, I offer the following descriptions from three different multimodal composition courses. Consider the "Networked and Multimodal Composition Syllabus" from The University of North Carolina at Chapel Hill:

This course aims to empower you, the student, with the tools, skills, and critical vocabulary necessary to compose sophisticated and meaningful digital compositions. By the end of this course, you will be able to: • tell stories effectively using text, image, audio, video, physical space, interactive systems, and social media platforms; • discuss and critically analyze digital technologies and their impact on how we communicate ideas; • plan, design, build, and publish your own multimodal projects, from start to finish.

Although the course's topic is multimodal composition, the only hint of materiality comes in the second bullet point regarding storytelling in physical space. Beyond this passing statement, this multimodal composition course makes clear its preference for and pedagogical focus on tasteful, digital deliverables. I have no intention to uphold the print/digital binary with the discussion of materiality and multimodality I advance in this project; instead, I aim to highlight the existence of this false division and argue, as

Shipka does in *Toward a Composition Made Whole*, for materiality as a significant part of multimodal composition that teacher-researchers should not overlook.

"Composition II: Researching the Public Experience" at Eastern Michigan University features multimodal design as one of its course outcomes, indicating students "will have composed using digital technologies, gaining awareness of the possibilities and constraints of electronic environments" ("First-Year Writing Program Principles and Outcomes"). Materiality is not a possibility for this course's students. Even some graduate studies cannot escape the lure⁷ of the multimodality myth. A graduate seminar listing for "Multimodal Composition" at Auburn University provides a description of course content: "Weekly reading responses (print and multimodal); discussion facilitation for one class period during the semester; a series of scaffolded assignments leading to a substantive, article-length (print or multimodal) scholarly research project to be presented to the class" ("Studies in Composition: ENGL 7050 Multimodal Composition"). Like most of the previous examples, this course others multimodality, situates print culture and materiality outside the multimodal conversation, and upholds the resulting binary. For those graduate students encountering multimodal composition for the first or only time, the multimodality myth provides disadvantages long before they have opportunities to spread it to their own students; for example, this multimodal/print dichotomy could inform their own pedagogical research and application for future multimodally enabled courses, limiting the potential for nondigital projects.

Utilizing these examples from the field is in no way meant to disregard their programs or classes, nor do I seek to place blame; instead, I applaud their efforts for

⁷ See Harker's The Lure of Literacy: A Critical Reception of the Compulsory Composition Debate.

including multimodal composition in their pedagogies. As I posit in this chapter's introduction, these lessons are helpful in an introductory sense, but they start to break down when we move beyond the introduction of multimodal composition. With a shift in perspective, these programs and educators could resist the multimodal/print binary and edit their materials to discuss print culture or the alphabetic modality as a component of multimodality to illustrate that writers and their (multi)literacies are always already multimodal, which is a foundational concept of the theory; furthermore, they could use the multimodality myth as a warning to avoid possible misapplications of the theory.

Findings from this case study offer a way to redirect the multimodality myth to a more progressive end, providing teacher-researchers with methods for situating intermodality in their composition classrooms and testing the theory with their own research. As I posit in the previous chapter, situated intermodality, specifically the overlapping nature of multimodal communication, represents a chance to redirect the multimodality myth and have a situated composition made whole. Our composing processes are always already intermodal because they share commonalities of expression across unevenly overlapping modalities, so students are cognitively incapable of switching off or on multimodality at will. In addition, remediations of the print paradigm would have them believe that multimodality has no place in essayistic composition and that literacy cannot be a print/digital hybrid; however, what this case study reveals and what the remainder of this chapter offers are contradictions to these mythic constructs in the form of student experiences. By examining the results of this

 $^{^8}$ See Ede's Situating Composition: Composition Studies and the Politics of Location and Shipka's Toward a Composition Made Whole.

case study as situated intermodality in the following sections, I posit that the complementary processes of psychological and operational intermodality and the presence of material intermodality in participants' composing processes offer pedagogical means to identify and redirect the pervasive effects of the multimodality myth.

4.1.1 Myth Part I: Impossible Expectations

The first part of the multimodality myth involves cognitive abilities. Many multimodally enabled composition pedagogies, like the examples from the previous section, unintentionally model a problematic structure for students. Such pedagogical spaces create impossible expectations by framing multimodality as a concept separate to writing or a mental skillset that may be turned off and on at will. For a commonplace example, consider a composition course that asks students to write something traditional in word-processing software before presumably transforming that work into something multimodal; a variation of this example is to offer multimodally enabled versions of these projects in place of their print alternatives. Students may have some initial success with this approach, but it will eventually lead to the unrealistic expectations I discuss throughout this dissertation; ultimately, this lesson is not in line with the NLG's pedagogy of multiliteracies or Rhetoric and Composition's pedagogy of multimodal composition because alphabetic composition is always already multimodal (Kress 181; Palmeri 9). In other words, the alphabetic is an intermodal component of multimodal composition; however, as Bartholomae and Shaughnessy argue, errors in our field should represent pedagogical opportunities instead of catastrophic failure. Discussing the plight of novice writers in Basic Writing, Shaughnessy in Errors and

Expectations argues that "their abilities to draw analogies between what they knew of language when they began school and what they had to learn produced mistakes; and such was the quality of their instruction that no one saw the intelligence of their mistakes or thought to harness that intelligence in the service of learning" (394). By considering all teacher-researchers as lifelong students of writing, I apply Shaughnessy's understanding of errors to the field as well as this case study's participants, reframing the mistakes of the multimodality myth as opportunities for continued conversation instead of engaging in the rhetorics of crisis, decline, or agonism; to that end, the primary data from this case study reveal a kind of mental hybridity that redirects the first part of the multimodality myth: psychological-operational intermodality in students' (multi)literate experiences.

The topic of alphabetic composition generated an explosive response in the focus groups. In fact, Geoff and Amelia say they use the alphabetic modality most often for academic projects, and Zara, Valery, and Dawn mark it as their preferred modality for academic as well as creative projects. The participants were conflicted when I asked if traditional academic essays fit their definition of multimodal composition. The idea of monomodality (e.g. essays as only alphabetic) can confuse the human psyche because our minds operate intermodally; consequently, several of the participants appeared to use this moment to challenge and think through their ideas about multimodality, modeling the recursive, overlapping nature of psychological-operational processes. "Up until pretty recently," Amelia shares, "I would have said, 'no,' but I just started learning about multimodality in my English class. Now, I would definitely say, 'yes,' because not only are you reading, but it's also about the type of words you use, which influences it a lot too." With the lessons of multimodality fresh in her mind, Amelia applies her

working theoretical definition to the challenge of analyzing her stance on traditional academic dissemination, positing "research papers are a big thing, especially when they let you use pictures, for example in science with graphs." Zara's position is similar: "To me not really, I guess, but at the same time, I see that we need to do the margins, text, and stuff. Technically, it's still only alphabetically and visually, so maybe." Once the conversation turned to include the visual nature of traditional essays, the participants began discussing the formatting requirements involved in academic style.

Maggie agrees with Amelia and Zara, saying "I'm not sure about the essay because it does have visual and alphabetic. So I feel like it would." Valery complicated this discussion by considering another modality at play. "That is true," she offers, "because not only is it visual and alphabetic, it's also spatial and the fact that it puts space on paper and also your time—space and time." Phoebe replies, "I would agree with what you guys are saying. It would be considered multimodal in my opinion. . . . I feel with an essay oftentimes will limit the amount of visuals and creativity that you can use in the composition. But it would still be, in my eyes, multimodal." These conversations typify operational intermodality because the participants consciously engage the overlap across modalities to compose meaning within the personal modality (i.e. the mind's eye).9 For Pabla, "there's also a sonic aspect to [a traditional essay] because it has to have a flow, and it has to make sense if you read it out loud; otherwise, it's complete garbage." Although she does not answer definitively, Pabla discusses the academic essay in multimodal terms by addressing aurality within alphabetic composition. These positions challenge common perceptions among teacher-researchers in the field because these students characterize alphabetic composition as interconnected with their other

⁹ See Cope and Kalantzis' "Multiliteracies': New Literacies, New Learning."

communicative modalities instead of separating the modalities from one another; in other words, traditional essayistic composition can have sonic, visual, spatial, personal, and sometimes gestural considerations, depending on the materials utilized to make an academic argument.

Unlike the others, Geoff and Dawn are resolute in their positions on the traditional essay. Geoff's answer is simply, "No, it would not"; however, Dawn offers an explanation: "Multimodality is very new to me because I'm a nontraditional student: we didn't grow up with doing anything but writing, so incorporating that stuff still seems to me like a paper unless it's presented in a non-paper form." Perhaps Dawn's position is, as she suggests, a result of the newness of the theory in her mind or her status as a nontraditional student; however, her answer provides a glimpse at the multimodality myth because Dawn's product-driven conception of multimodality is dependent on the print paradigm. Like many novice writers, she conceives of writing as something that happens on paper and multimodality as something else from digital culture or social media. For Dawn, writing and multimodal composition are completely different concepts. Valery offers some insight into Dawn's understanding:

I think the reason why most people might define traditional essays as not multimodal is the fact that [they're] so straightforward to the point that it seems like [they're] only one thing . . . because maybe multimodal stuff would be like videos and . . . pictures to prove your point and also your own voice in space . . . while traditional essays are just a piece of paper. That's . . . typically the norm of sending to teachers and professors ever since you were a little child.

In this response, Valery describes the multimodality myth's effects as she perceives them in other people's conceptions of traditional essays. As I posit in chapter 1, the multimodality myth creates this perspective that multimodal composition, in part or in full, can be switched on or off at will. Despite their openness to the theory of multimodality, Valery and Dawn echo the myth with a product-driven dichotomy between paper and non-paper, and in that false dilemma, a traditional academic essay, even with the inclusion of non-alphabetic elements, could only be a paper.

In her discussion of traditional academic essays, Phoebe mentions her inductive approach to multimodal composing projects, revealing the psychological-operational process that governs her critical thinking and its rhetorical application:

If we're thinking about essays, anytime that I'm given a prompt or assignment or application, the first thing I think of is a visual representation, even if it has nothing to do with pictures. That's just the way I think. When I hear music, I see a visual all the time. That's where my mind first goes, and then that helps me write the alphabetic part. When I am writing it, I want to make sure that I have the visual I had originally and that it comes across with the creative writing and rhetoric that I'm using. I want to make sure that I'm describing things to the best of my ability in the way that I want them to come across, so I guess I kind of think backwards. Most people would create an outline, but I hate outlines because I feel like they limit me.

Phoebe's first impulse for utilizing multimodality in her writing is to visualize its formatting and requirements to work inductively or "backwards" in her words.

Referring to multimodal composition, she says, "I definitely have language now because

I just considered them all presentations or projects before. I think growing up in school, we were always given a step-by-step roadmap to writing an essay, and my mind never worked that way." She also extends this conversation to discuss what happens in her mind's eye (i.e. personal modality) when she hears music. Her psychological-operational process is dynamic, and she cannot choose whether to be multimodal. Visualizing the essay is a subconscious, psychological effect of her mentality that she utilizes through conscious, operational manipulation by checking her work against the vision she has for the project. Psychological intermodality becomes a sort of mental storyboard in the case of the essay; for the music, as I posit in chapter 3, she uses visualization as an intermodal platform to redirect her multisensory thoughts as a heuristic for production. Arguing that she "kind of [thinks] backwards," Phoebe makes the case for inductive analysis using intermodal means. Interestingly, she rejects the idea of a traditional outline; perhaps she has no need of a standard outline because her mental storyboard serves as an alternative.

Dawn, like Valery, uses intermodal perception via psychological-operational means to craft a mental storyboard, which I argue is evidence of intermodal composition; however, Dawn bolsters her process with written materials, saying,

I'm old-school, so I have a planner. I write everything on my planner. I have to visualize everything I do pretty much from the minute I wake up of how my whole day is going to be. With studying, I have to do a lot of traditional writing for my classes right now, so I really have to think about what I'm going to write about, what each paragraph is going to contain. Then, I'll start writing. Essentially, everything is written in my head, and I just have to get it out on paper.

As she indicates in this passage and throughout our conversations, Dawn is an extremely visual person with several competing demands on her time. Admittedly, from the moment she wakes up, she cannot turn off her multimodal self. She depends on psychological-operational intermodality in the mornings to sort through the day's events in her mind's eye. Traditional writing, as this example illustrates, is inherently intermodal in multiple ways. For her essays, she mentally walks through her ideas for paragraphs, which eventually will become topic sentences to expand via interconnected acts of multimodal composition. By her own admission, the work is partially drafted in her mind long before she puts it down on paper or, most likely, in word-processing software. Geoff agrees with Dawn's perspective, saying, "all of this is in my head, and I could easily spew it all out. But having to actually structure it in a way—even having a structured speech or talk of any sort—kind of messes with me a little bit." This usage would be familiar to many writers who do the same, offering a pedagogical connection between traditional writing and intermodality.

During the focus groups and interviews, many participants shared experiences that elucidate this overlapping, recursive presence of psychological-operational intermodality within their multimodal composing processes. Taken together, these firsthand accounts reveal the intermodal nature of multimodality, providing evidence that counters the first part of the multimodality myth. Geoff is currently working on creating an art collective with his friends. He describes his efforts to generate initial ideas for this ambitious project:

When I listen to music, I see color, light, shapes, and all this crazy stuff, so for the past couple years, every once in a while, I would record and edit a video to go with a thumping synthwave song or something like that. I would color adjust everything and do photography with it, and I just kind of want to make all that come together because I really think visual elements and auditory elements, like you were saying, they really do overlap. You can show someone like the color red, and it's kind of an evil color. And it could evoke the same feeling as a scary sound or a spooky, dark song.

At the opening of this passage, Geoff describes psychological intermodality through his mental characterization and visualization of music via color, light, and shapes. He has no conscious control of his mind's reaction to music, but Geoff knows that he can utilize these multisensory appeals for multimodal composition. These psychological reactions represent part of his available means of persuasion. He immediately moves the discussion into operational intermodality, transferring his psychological understanding to the operational via recording, editing, remixing, and color correcting to appeal to his art collective's constructed audience: "It's all about ethos: what it would sound like to other people and how they would interpret it vocally or gesturally. But it's also a visual thing as well. What is someone going to be thinking when they are reading or watching or hearing me talk?" Aware of the psychological, intermodal processes of audiences, he posits that sonic and visual modalities do overlap, intimating that audio-visual meaning is something altogether different from sonic or visual meaning separately. At the close of this passage, he blends psychological and operational intermodality to speculate how his experiences could influence audiences via certain colors and sounds.

Although her previous response participates in the multimodality myth, Valery contributes several points to the conversation that wholly resist the myth. We should regard these missteps as opportunities not errors. She says,

I feel like it's really natural for me to do multimodal composition because I feel like that's the most natural and fun way to do it. Just doing that one thing makes me feel kind of empty inside. Multimodal composition is very similar to the five senses. Doing a project is equivalent to making food. You want to use everything you can to make the best dish you can possibly make. Overall, it's just worth it. Multimodal composition helps me a lot when it comes to writing overall. I don't think I'd ever be the same if I didn't do multimodal composition. I don't think I've ever not done multimodal composition with writing.

Trying on the voice of authority, Valery invents the university in this passage to describe multimodal composition as the natural way to approach writing, and I posit that this usage feels natural because it syncs up with her psychological-operational processes for making meaning. She is a multilingual, transnational communicator with a unique perspective who recognizes how multimodal composition has already changed the way she conceives of (psychological) and produces (operational) writing. Zara has a comparable multilingual, transnational ethos, and she posits similarly that "multimodal composition [is] something that you do naturally to express yourself on that piece of paper. I feel like it's necessary. I'm not saying that it's a basic need, but it's something I do unconsciously. It's something I've done since I was a child." Valery's unconscious multimodality characterizes psychological intermodality, and her answer resists the multimodality myth by recognizing that what she puts "on that piece of paper" is an act of multimodal composition. For Amelia, multimodal composition "is the best way to express myself personally, and it's the best way for me to learn. I have a lot of trouble learning in class if there's not like a PowerPoint. . . . I've also found it's [difficult], even if

you try really hard, you can't use just one modality. You're always using at least two. It's easier than I thought it would be." As Amelia's perspective illustrates, the impossibility of monomodal composition provides additional evidence that multimodality is a condition of the human experience and unable to be switched on or off. In these responses, Valery, Zara, and Amelia admit that the concept of multimodality helps with their composition or communication overall, ultimately deciding that their writing has always already been multimodal. The various rhetorical situations from this section offer evidence that multimodality and intermodality are inherent to the human condition and cannot be switched on or off whatsoever.

The concept of intermodal composition I advance in this project represents one way to address this false dilemma. Building on our rich multimodal heritage, intermodal composition is an approach that considers process (psychological-operational) and product (material) as facets of multimodality without prioritizing one over another. For example, the composing process is intermodal in a way that is altogether different from the composed product. To borrow the transportation metaphor from chapter 1, an intermodal transport system utilizes various modes in conjunction without unpacking the crates during each moment of transfer (e.g. sea, highway, rail, air) much like writers use various modalities psychologically and operationally throughout the composing process without stopping to analyze the subtle differences among the project's alternating sonic, visual, alphabetic, gestural, spatial, or personal influences; furthermore, the products shipped via this system or their individual carriers may also be described as intermodal because they went through the process (e.g. a crate from ship to train to tractor-trailer). Consequently, composing multimodally does yield a multimodal composition, but these concepts are not identical. When writers choose to

compose using the theory of multimodality, they are engaging in the hybrid, cognitive processes of psychological-operational intermodality to deliver a product: material intermodality; if we adopt this theoretical, intermodal construct as a complementary pedagogical framework for multimodal composition, we as teacher-researchers can begin to redirect the effects of the multimodality myth to more progressive ends.

4.1.2 Myth Parts II and III: False Dichotomies

The other parts of the multimodality myth represent nearly identical false dilemmas, one with multimodality and one with literacy, like sides of a two-headed coin. The first dilemma comes when well-meaning teachers ask writers to choose between multimodality and the print paradigm like the pedagogical resources featured earlier in this chapter. This false choice fails to consider the multimodal nature of print culture and its artifacts, frequently convincing audiences that multimodal composition and digital composition are synonymous. The second dilemma comes when we separate literacy into print or digital spaces with no possibility of anything in between. Acquiring literacy is a years-long endeavor, and all the experiences therein do not fit perfectly in one of two paradigms. The NLG's pedagogy of multiliteracies, the predecessor of multimodal composition, makes clear that literacy is at once print and digital¹⁰; therefore, forcing writers to choose between print or digital literacy, like the choice between paper or multimodal, completely misses the inclusive nature of these foundational theories. Even though writers may design a document for print, we usually do so on a screen using word-processing software and often send that document via email, and we can never be sure if the audience accesses the document in print or on

¹⁰ See the New London Group's "A Pedagogy of Multiliteracies: Designing Social Futures."

screen. The materiality of multimodal composition or multiliteracies is hybrid, allowing for rhetorical possibilities that are both print and digital, and primary data from this case study illustrate this hybridity of material intermodality, which resists these second and third parts of the multimodality myth.

Collegiate teaching is a multifaceted endeavor because it utilizes printed, tangible, remixed, digital, and hybrid artifacts to appeal to students of the social media era, and it often involves lessons remediated from screen to page and vice versa. For example, Maggie has a class that wades through diagnostic criteria on a weekly basis, and her teacher had to adjust course content and delivery based on students' learning experiences:

Three weeks into the course, she's like "this isn't working" because she couldn't capture our attention. She prints out all the slides now on colorful paper and gives them to us. She says, "now I can present to you because you don't need to take notes." It actually works out well.

This pedagogical situation effectively demonstrates the hybrid nature of multimodality and literacy. The multimodality myth would have us believe that the teacher's slides are either print or digital; however, the only difference is the materiality of the documents, which over time are both print and digital. The slides are no more or less multimodal in print form, nor do they solely represent print literacy because she remediated the slides from screen to paper. Marking them as print or digital at any given moment based on their delivery completely erases their process-driven trajectory across both paradigms. By reframing this experience as material intermodality, we are free to explore the interconnections between print, digital, and remix culture and the effects these exchanges have on their audiences.

The inclusion of multiple communicative modes and media for pedagogy appeals effectively to twenty-first-century students, and Phoebe agrees with this perspective in her continued discussion from chapter 3:

Going back to the presentation I had this morning, I did have a total of three sentences on the whole video that I did. It was like 4 or 5 minutes. There were literally three fun facts, but I made sure to incorporate some kind of visual transition with fish covering the fun fact before it appeared and still having that sound to make the alphabetic stand out a little bit more. . . . The more things you can engage in any activity, I think it becomes more memorable. Multimodality is no different than that.

To extend Bartholomae's metaphor for invention, I posit that Phoebe invents the multimodal university in this passage because "there is only one moment when the fiction is broken, when we are addressed differently" via second-person perspective. "At this point," in accord with Bartholomae, "I think, we become students and [she] the teacher, giving us a lesson" (as in, "you want to engage as many modalities as possible in multimodal composition"). He indicates that it is quite difficult "for them to take on the role—the voice, the person—of an authority whose authority is rooted in scholarship, analysis, or research. They slip, then, into the more immediately available and realizable voice of a parent lecturing at the dinner table" (6). After establishing her insider status as a multimodal presenter, Phoebe slips into the familiar "you" when she attempts to apply her specific example to a general, practical lesson. Her three fun facts, based on printed research, exist as remediated content. Because her presentation is light on alphabetic meaning, these facts have a much greater impact on audience members because they do not have to read multiple paragraphs on each slide; consequently, what

they do have to read is much more memorable if not more powerful. Phoebe resists the multimodality myth in this instance by situating alphabetic meaning as one multimodal choice among several for delivery.

Dawn is a self-identified nontraditional student who uses collegiate experiences to teach her young daughter how to communicate. She "is trying to teach [her] three-year-old daughter how to spell her name, so [they] do a lot of clapping and tunes. [They] listen to videos that talk about the different letters of her name, and then she copies [Dawn's] writing. [They] do it with different things like crayons or . . . Etch-a-Sketch. Also, she tries to paint them." Multimodality affords users the ability to try on multiple persuasive media that may be tangible, printed, digital, remixed, or something in between; the product and process are intermodal. Her daughter's literacy acquisition in this example is print and digital, moving in and out of both paradigms to yield something hybrid:

For her, I have to decide on what it is I'm teaching her. If I'm teaching her how to dance, I'm going to use gestures and physical expression. If I'm teaching her how to spell her name, I'm using the alphabet and music, so it's visual, sonic, and alphabetic. A lot of the sonic is what initially helps her, so we start out with the sonic and clapping and making a little song out of things. Then, it's me moving into writing and getting her interested really. Not only am I teaching her how to spell her name in English, I'm also teaching her in Spanish. Because it's challenging, she really likes it. . . . IT]his week I noticed her writing her name and being so proud.

To label these events as print or digital based on any one component would leave out significant parts of the process. Watching the videos informs her daughter's print

literacy, and practicing her letters in print upholds the videos' digital lessons; in this way, the young girl's written name is material intermodality, the product of psychological-operational processes for making meaning. Referring to multimodal composition, Dawn posits "that it has helped [her] expand, realizing that there are other ways to express yourself beyond writing things on a piece of paper. Even though it's always been that way and there have always been other ways, [she] didn't really see it until" her compulsory composition courses. Despite some initial resistance to the lessons of multimodality, Dawn, like Valery in the previous section, ultimately recognizes that her critical thinking and writing process are always already multimodal, and for Dawn, her literate experiences with her daughter confirm this theory.

Phoebe and Pabla's academic experiences offer another perspective of material intermodality that resists the false dilemmas of the multimodality myth. In high school, "even when [Phoebe] played volleyball, [her] coach would give [them] a drill, and he would physically act it out for [them]. But [she] had to see the visual, bird's eye view: draw some x's on paper and draw the lines, and then [she understands] where you're coming from. It's interesting how some visuals work and some don't." When the drill was digitally projected or physically acted out, it did not provide enough information to appeal to her psychological-operational processes; however, when the drill exists as lines drawn on a piece of paper, it immediately makes sense to her as a volleyball player. The coach's meaning not only reaches people who think like Phoebe but also those students who do respond to the same materials via screen or pantomime. The combination of these various approaches exemplifies material intermodality through an interconnected deployment of print and digital materials. Pabla also shared an interesting experience of crafting material intermodality; when she "was worried about

college, and [she] needed to do something to feel accomplished and to take away the pressure of where [she] would go," she reports engaging in multimodal composition for an inspirational project:

I had a bunch of those postcards and stuff that colleges send you. I had a ton of those from like 2 years, and I was really stressed out about college. So I just decided to make a collage. I cut up the most inspirational quotes from all the different catalogs and everything. Some of them even have my name on them, so it was cool. I still have this huge collage up on my wall.

During our conversations, Pabla indicated that these materials contained both print artifacts and digital documents that she printed out for the collage: "The act of cutting everything up really helped me." If we take the final product at face value, then labeling it as solely print makes sense; however, if we consider her whole creative process, this endeavor becomes an exercise in exploring material intermodality because Pabla remixed print and digital promotional materials into an inspirational art instillation.

Conceiving of composed products in this hybrid way ensures that the field does not leave materiality or print culture behind on our quest for multimodal composition, but I do not mean to indicate that material intermodality must be a combination of print and digital media; instead, I use this concept to argue that if we automatically label a rhetorical artifact by its final form, we risk ignoring the intermodal trajectory of the writing process. Material intermodality, in other words, challenges our tendency to conceive of writing as only a product to consider the process as well because composition is always already intermodal.

During our conversations, Valery offered an unexpected example of material intermodality with a discussion about gambling environments. She says,

multimodal composition [is] also about attention. How long can you keep their attention? Okay, I feel like . . . with gambling, they always use an atmosphere that's red or green—bright colors. Even though it's inside, there are no windows whatsoever, so you feel like you've only been there for a few minutes. You don't even realize because of the flashing lights and bright colors and awesome sounds of winning, but in reality you're actually losing. They always want you to think you're winning [by using] bright colors, the great sounds, [and] the awesome shifting of the wheels to hit that triple seven.

This example provides an explanation of the nefarious application of intermodal materiality. To Valery, multimodal composition is about keeping the audience's attention or capturing their intermodal perception with various multisensory appeals. Casinos employ a variety of multimodal strategies to ensure that players keep spending money: bright colors and flashing lights (visual), no windows (spatial), sounds of winning (aural-personal), and triple sevens (alphabetic). In the focus group, she and I joked that even gestural meaning is in play at casinos with the levers at the slot machines and on the facial expressions and in the mannerisms of dealers, bartenders, and wait staff. All these appeals depend on one another to produce an intermodal, rhetorical environment. When we consider the gambling environment in this way as a rhetorical situation, it becomes an example of material intermodality because the ambience captures the audience's attention via interconnected psychological-operational appeals.

With the taxonomy of situated intermodality I advance in this dissertation, we can teach the psychological, operational, and material facets of intermodality as internal

components of multimodal composition, which redirects the multimodality myth by design. An ideal starting place for this work is the topic of hybridity, a concept that students of the social media era already understand because they use it countless times throughout the day. For example, Zara feels "like Snapchat might be a good example [of multimodal composition] because you can do videos and photos and then you have text boxes, but you can also incorporate sound into it. Depending on how you arrange your stickers and words, it becomes a full picture but using different forms of shapes and words to make it." Zara uses an illustration from social media to describe multimodality, and I posit that we can extend it to include intermodality because these digital spaces depend on the interconnectivity of modalities to make meaning. Consider the intermodal nature of emoji: what began as alphabetic expressions of facial features using alphanumeric characters has transformed into a visual expression of faces, gestures, and hundreds of other symbols. To this day, I can type a colon followed by closed parenthesis in many digital spaces to produce a smiley face character. Emoji, and social media in general, are intermodality made material.

Because ours is an audio-visual culture, psychological-operational intermodality and audio-visual rhetoric offer pedagogical entry points to redirect the multimodality myth while modeling the hybridity of intermodal composition. Hearkening back to Bartholomae, "a student, after the first year or two, must learn to try on a variety of voices and interpretive schemes—to write . . . as a literary critic one day and an experimental psychologist the next, to work within fields where the rules governing the presentation of examples or the development of an argument are both distinct and, even to a professional, mysterious" (4). Multiliteracies, multimodal composition, and intermodal composition require some of those various voices and interpretive schemes.

Instead of avoiding such issues, we should revel in the mystery with our students and treat the drawbacks of multimodal argumentation as puzzles waiting to be solved like Valery does in the experiences she shares in chapter 3. By following Bartholomae's pedagogical example, we as teacher-researchers can return to the field's tradition of listening to students and ask them to join us in inventing the university anew.

4.2 Inventing the (Multimodal) University

Intermodal composition involves the deliberate manipulation of one's psychological-operational processes to craft material intermodality, which can be tangible, printed, digital, remixed, or hybrid. This concept originates from student experiences and a need to address the multimodality myth; in other words, the participants in this case study and I invented the multimodal university so that I could compose this dissertation. To remix their composing processes using intermodality, this section offers examples in which participants position themselves as insiders in academic conversations about multimodal composition. Sharing a fabulous example of historical remix, Valery applies her understanding of multimodal composition to an activist setting:

Kairos is like the perfect moment to present something or prove your point in an argument. So I feel like choosing the best modality for you is like integrating all these different things like relationships, audience, text, and space in order to make the perfect moment to make the best of the best of what you can do. It's like Martin Luther King Jr. who did radio and television and a real-live speech in front of different people to not only

rally the people who already supported him but gain the people who were on the fence. He did, I believe, multimodality.

Valery knows that to speak as a fellow researcher, she must invent the multimodal university, choosing to begin with a definitional argument of kairos to establish her insider ethos; without this rhetorical platform, she would need another way to contribute to the conversation as a fellow researcher. With this newfound authoritative voice, she transitions to her argument that Dr. King participated in multimodal communication. "He did different things. Again," she continues, "like with the radio, it was only his voice. In the live speech, he was right there in front of them, doing visual and gestures and also changing the inflection of his voice. He was really preaching." Once Valery positioned herself as a rhetorical insider, she felt free to share her intermodal thought process and resulting example of what it means to compose multimodally.

Audio-visual meaning is another source ripe for intermodal discovery. Phoebe makes a similar rhetorical move with positionality, situating herself as an insider within audio-visual culture, saying,

I've done a lot of film. Broadcast and video production is what I focused on in high school and still work on in college. I'm a music major, so I play violin and guitar—just like you said you play violin too? So learning that was obviously multimodal, but within music, there are so many different aspects of the industry. There's broadcast, interviews, performance—things like that. I always find that I end up going back to filming and doing Photoshop and making promo, so it's interesting how things in my life that

used to be so separate and each had their own multimodal projects are now becoming one—one big blob.

Instead of using rhetorical language like Valery, Phoebe chooses to share her specialization in visual and musical production. This dramatized setting allows her to revisit and remix these experiences as sites of multimodal learning. Her status as a violinist, guitarist, and musical composer provide unique perspectives for making visual promotional materials; even though these personas are primarily sonic, they afford her the ability to appeal visually to audiences comprised of musicians based on their expectations for audio-visual rhetoric. Ultimately, she realizes that these seemingly disparate modalities and lessons overlap mentally into "one big blob," which I argue is evidence of psychological-operational intermodality.

The overlap among audio and visual modalities yields a marginal space where we all must invent the university in a sense. Because multimodal pedagogies split the modalities as they do, there is rarely discussion about audio-visual expression as a hybrid modality. Halbritter, in *Mics, Cameras, Symbolic Action*, provides an exception. A herald of the figurative and literal power of duct tape for audio-visual rhetoric, his book models a people-first pedagogy and demonstrates masterfully how to deliver theory based in research into practice (i.e. praxis). Halbritter's work is also especially helpful for teacher-researchers because it offers pedagogical resources throughout as well as handout examples, tips for course design, and audio-visual writing assignments. Citing Kenneth Burke's symbolic action as a theoretical framework, Halbritter's main argument is that we should question the *telos* or purpose of writing pedagogy and configure it to goals that teachers assign because "a writing assignment is a vehicle for realizing learning goals—it is not merely a recipe for producing a type of writing, even

though it will do that along the way" (198). In a dialectical move, he seeks to redefine writing for the twenty-first century before continuing his conversation of audio-visual rhetoric for writing teachers.

Halbritter compares the process of musical composition to the process of writing academic and professional prose (then to documentary filmmaking) as forms of authoring (5-6). Central to this conversation is the investigation and foundation of means for the realization of common writing goals (7). Relying heavily on Burkean theory, he asks readers to conceptualize writing "as more than exclusively linguistic—as drawing from the expanded resources of symbolic action" (18). "If we, teachers, are to retune our approach to student-centered writing pedagogy," Halbritter argues, "we must listen for consonance and dissonance beyond the walls of our classrooms and beyond the pages of our syllabuses." Again, listening—not just lecturing—is paramount to a student-centered writing pedagogy: "Our assignments must be situated not only within the scaffolding of our course goals but also within the institutional scenes of symbolic action, for those scenes shape how our students (and our colleagues) fit their interests and attitudes to our assignments" (47). Halbritter's "institutional scenes of symbolic action" track closely with Bartholomae's "setting required by the discourse" (47; 6). In the dramatized settings of multimodal composition, we as teachers are the directors, and our students are the players tasked with realizing our dramaturgical, pedagogical vision via rehearsal, production, and performance.

Participants in this case study frequently discussed the sonic and visual modalities and their overlapping nature for multimodal composition throughout our time together. Pabla cites them as a necessity to her academic performance, indicating that many "times, the visual and sonic aspects are the most important because when you

have a project, you really want your professor or audience to remember it—the way that we remember things from hearing it or listening to it." Great performances are transcendent and memorable, and Pabla is aware of these expectations. For her, this process involves "writing things down and making sure [she has] all [her] ideas down in a Word document or something. Then, the visual aspect and the sonic are important too, especially if someone is reading out loud. A lot of times, when [she's] writing a paper, [she hears] the words in [her] head, and there's a flow it has to have." When asked about her preferred modality for academic projects, Phoebe gives an intermodal answer, saying "it would definitely be sonic-into-visual, no questions asked." In this usage, she creates a hierarchical, hybrid modality, which prioritizes the sonic and crosses into the visual: "I feel like sound really adds to a moment. It brings someone in. When you have something—to not only see but—to listen to, I feel like you're not prone to listen to everything else around you." As discussed in chapters 1 and 3, one of the effects of psychological intermodality is the subconscious ability to tune out certain sensorial data to focus on production in any given modality; however, employing this concept knowingly represents operational intermodality. Phoebe's example depends on consciously using the hybridity of modalities as a rhetorical strategy because for her, "sound just adds to the visual, and the visual gives you something to remember. [She's] also a really visual person, so if [she sees] something, [she wants] to see it on paper or in film and then have a sound that goes along with it." Despite her hierarchal characterization of this overlapping audio-visual modality, Phoebe concludes that "they are of equal importance."

Valery and Phoebe compare the sonic and visual modalities using the metaphor of family. For Valery, "they're almost like siblings" because they share commonalities of

expression but differ enough not to be identical twins. "Composing," she continues, "or writing music, is the same thing. You're writing notes, but they don't see the notes unless you're a musician who understand how to read notes." Based on this example, I argue that all forms of composition, including musical, are always already intermodal because they influence one another rhetorically and share commonalities of expression across overlapping modalities; furthermore, the processes differ from one mind to the next due to each person's unique cognitive development. For example, musical composers, as Valery points out, may visualize the notation behind the music they hear, whereas an audience of laypersons can only hear the music via sonic meaning and understand it partially via alphabetic lyrics in some cases: they cannot see music with the eyes of a composer.

Valery extends this familial metaphor to essayistic composition as well, saying, "in writing you can also do it with auditory. In a sense, they are very similar because in composing, you can read the notes, but you can also hear." Repeating her point about the "sonic-into-visual" modality, Phoebe's metaphor situates the sonic and visual modalities as much closer family members:

I do think they are of equal importance. Like I said, I feel like they're married couple, and they're not complete without each other. I have made silent films or some sort of visual without audio, but I always feel like it could have been better had there been audio or vice versa. If it's just audio and I'm trying to explain the visual that's in my head, it could have been better had I been able to present it to the audience. . . . I think the only time I would separate them is if I had to in a project, and then I would be like, "this is not as good as it could be."

For Phoebe, the sonic and visual modalities represent a partnership in contemporary rhetoric. She goes as far to say that they are incomplete without one another. She recalls and also speculates about instances when one of these modalities was not an option for rhetorical composition, indicating that the end result in these cases failed to meet her academic standards. By her own admission, the modalities overlap in her mind's eye and are greater than the sum of their parts; in other words, audio-visual meaning is possible because sounds and visuals share commonalities of expression. For an intermodal example, Valery says, "I think it's all about the easy relationship between the modalities. Visual and sonic are so helpful to each other. They go hand-in-hand. Movies are all about visual and audio except for before with silent movies." During our conversations, Phoebe also mentioned old silent films: "We used to have movies without sound, and they were cool. But then they brought in sound, and it was amazing. . . . It creates a whole new experience and can take an audience into a different world, having the sound and the visual." Over the course of our talks, Phoebe and I remembered that many silent films were accompanied by pianists, organists, and in some cases small orchestras, recognizing that audio-visual rhetoric is much older than digital culture.

Audio-visual meaning is also present in the traditional academic essay. The visual aspects of essayistic composition are immediately apparent: typeface, margins, spacing, colors, and words. The sonic aspects of essayistic composition exist just below the surface. Throughout this case study's primary data, participants discussed the sounds of traditional writing as paramount to the final product. As I cite in this and the previous chapter, several of these students read their written work aloud as part of the process, indicating a need to listen as a reader would. In these cases, they use their minds as an intermodal platform to try on audio-visual rhetorics within their projects. As rhetors,

these students hope to build their ethos by capturing the sounds of authority in writing so that they will resonate in the ears and mind's eye of audiences. The interplay of audio-visual intermodality is a vital aspect of essayistic composition. This concept echoes our usage as professionals at academic conferences or invited talks when we compose an essay to be read aloud: our composing processes, like those of our students, are always already intermodal.

4.3 Intermodal Composition: A Pedagogical Framework

At once, intermodal composition is student-focused, technologically relevant, resistant to the zeitgeist, and beyond the existing boundaries, and it reinforces our principles and the methodology that founded our field: listening to novice writers to craft a student-centered pedagogy. A pedagogical framework for intermodal composition should investigate students' experiences with composing in our current technological moment. Paying close attention to theories of crossover, transfer, and intercultural communication, this approach reaches beyond scholarly characterizations of multimodal composition by emphasizing student conceptions of composing, especially ones privileging both audio and visual modes of production. As I demonstrate throughout this dissertation, theories underlying contemporary multimodal composition pedagogy and their application depend on restricted views of the rhetorical situation more generally, one that I believe is defined not by singular modes of production (audio or video) but by the interplay among the varied, uneven, and perpetually converging modalities that constitute what I call intermodality. To support this framework of intermodal composition, we should continue to draw on findings from student experiences. The taxonomy I developed in this case study represents an entry

point for other teacher-researchers wishing to explore intermodality; however, as I argue in this and the previous chapter, this categorization is not meant to be totalizing, but it is applicable beyond one case of students' experiences. There are countless additional approaches to intermodal composition that teacher-researchers in the field can only discover via listening to the audiences of our pedagogies and inventing the multimodal university anew; therefore, we should re-contextualize contemporary theories of composition and pedagogical conditions for our students in a fashion that reimagines what it means to participate, compose, and advocate with multimodality in the composition classroom.

In the groundbreaking collection *Multimodal Composition: Resources for*Teachers, instead of arguing for multimodality as a revolutionary catalyst, contributors collectively "argue that opportunities to think and compose multimodally can help us develop an increasingly complex and accurate understanding of writing, composition instruction, and text. It is only teachers' learning about new approaches to composing and creating meaning through texts that will catalyze changes in composition classrooms" (Takayoshi and Selfe 6). The study of intermodality represents some of these increasing complexities of writing and new approaches to composing. Even though intermodal composition is the goal, it is important to introduce students to multimodality first. NLG's pedagogy of multiliteracies and Rhetoric and Composition's pedagogy of multimodal composition stand as the firm foundations of multimodality in our field. Once we establish these introductory lessons with students, there is immediately an opportunity to discuss the multimodality myth. While the myth is problematic in general, it is useful in a sense: we as teacher-researchers could employ

the concept in a classroom discussion about what not to do. These errors become opportunities when we use them to teach students about best practices.

With an understanding of the multimodality myth, students would have enough theoretical knowledge to explore intermodality as a critical component of multimodal composition because at that point they would have encountered the boundaries between modalities and the problems the myth causes for multimodal composers. I suggest audio-visual rhetoric as an entry point for introducing intermodality because ours is an audio-visual culture, and Halbritter's Mics, Cameras, Symbolic Action provides a valuable resource for "exploring and establishing means for realizing common writing goals. This is a pedagogy for developing writers, not for perfecting forms of writing" (7). Developing writers should be our primary charge, and a pedagogical focus on audiovisual intermodality allows us to situate people over technology by listening to our students because as this case study demonstrates, there are already some students who value this hybrid modality in their writing lives. Halbritter posits that "[a] liberatory/democratic pedagogy for writing must imagine and target a variety of forms of legitimate rhetorical action that correspond to the variety of rhetorical situations that our students will encounter" (13). Audio-visual culture is a helpful example of intermodality in general because it allows teachers to address the overlapping nature of the communicative modalities and their commonalities of expression. Valery and Phoebe's familial metaphors—siblings or married couple—could also prove useful through pedagogical application before moving on to situated intermodality in multimodal composition.

The transportation metaphor is a great way to introduce students to psychological intermodality in their composing processes, and this dissertation provides multiple examples of this approach. Many of our students already enjoy writing in noisy coffee shops or quiet library rooms, and they subconsciously use psychological intermodality to focus in these environments. In fact, this case study's participants and dozens of my own students indicate that their composing processes depend on certain ambiences like instrumental music, podcasts, or muted news. Their thinking is always already intermodal, so teachers need only provide commonplaces as evidence.

Operational intermodality offers students an opportunity to apply everything they have learned about multimodality to conscious acts of composition: this space is where acts of writing exist. They can use this knowledge to craft multimodal arguments for an audience using sonic, visual, alphabetic, gestural, spatial, and personal meaning based on their own psychological processes and critical thinking like Geoff's spooky colors and songs for his art collective. Students will begin to understand that psychological-operational intermodality is the process required by multimodal composition; it is the recursive mental dance between modalities that happens when we think and write critically. We can teach students to make use of this psychological-operational connection to appeal effectively to audiences of the twenty-first century.

The final lesson for this pedagogical framework is circular: the product of multimodal composition, whether printed, tangible, digital, remixed, or hybrid, is material intermodality. Halbritter's audio-visual pedagogy excellently illustrates this intermodal perspective:

Writing is the realization of a writer's writerly decisions. At all stages of a writer's process the writer dances between invention and revision, between exploration and arrangement, between guessing and knowing, between seeking and finding, between accepting and rejecting. Each step

of this dance is a step of writing—even if each step, when frozen in time and abstracted from the dance, does not look much like a prototypical dance step. (198)

Each step between modalities is an intermodal step of multimodal composition (e.g. from sonic to visual), and a student's experience with inventing the university or dancing through multimodality in one instance "will inform the next particular rendition of the dance, even if it does not dictate it. The next scene will present new problems, and the process will need to respond to those new particulars" (Halbritter 198). Halbritter's scene, like Bartholomae's setting, provides a useful metaphor for presenting pedagogies of intermodal composition to our own audiences. Once students learn to redirect the multimodality myth using situated intermodality, they will have a thorough understanding of multimodal composition and be able to utilize these lessons in the composition classroom as well as their daily lives. This student-centered pedagogy would help them avoid traps set by the myth and would encourage an expansive view of multimodal composition, allowing students to transfer and remix experiences from one modality to another.

More research is necessary to advance the conversation beyond these initial efforts. In the following conclusion, I will discuss implications for teaching and researching intermodal composition: a situated, remixed approach to multimodal composition. Utilizing the concept of intermodality as a pedagogical tool for multimodal composition provides a change in perspective, instead of a contentious paradigm shift, to help deter the rhetorics of crisis, decline, and agonism that threaten additional fractures within the discipline. I offer intermodal composition in this context because it encourages continued multidisciplinarity for the discovery of meaning-making and

persuasion in an increasingly hybrid world. While such a move could cause confusion, it is a worthwhile risk because intermodality offers a rewarding opportunity to move the field beyond myths and dichotomies that intensify long-standing arguments.

5 CONCLUSION

Intermodal composition is the deliberate manipulation of cross-modal connections between any of the communicative modalities: sonic, visual, alphabetic, gestural, spatial, and personal. It functions behind the scenes and across the margins via psychological, operational, and material means; however, meta-awareness (i.e. thinking about thinking) makes its study possible. While it is an internal function of multimodal composition, intermodality can also stand alone: communication is always already multimodal, but multimodality is inherently intermodal.

The crossover and transfer between the sonic and visual, for example, is evidence of intermodality in our everyday lives because ours is an audio-visual culture caught in a daily deluge of multimodal appeals: have you ever considered how a certain color might sound or visualized how a certain sound might appear? Taken together as a hybrid unit, audio-visual communication becomes something new because the interplay among these modalities comes into focus. Students of multimodal composition pedagogies may use these two modalities because a teacher encouraged them to do so; however, there is rarely direction to consider how they interact rhetorically due to the process or how an audience's expectations play into a writer's usage of audio-visual rhetoric. Some of these appeals are printed, tangible, digital, remixed, or hybrid, but all of them depend on composers' and audiences' intermodal processes for decoding and encoding meaning.

When a writer considers how to utilize multiple modalities in one space to make meaning, she engages psychological-operational, intermodal processes to craft material intermodality or as the field calls it, "a multimodal composition." While all writers already engage intermodality without knowing it, calling attention to its existence—like the field did for multimodal composition—affords new rhetorical possibilities for the writing process. Intermodal composition, in other words, represents another layer of our available means of persuasion.

Instead of relegating the modalities to exist only within strict boundary lines, as teacher-researchers in Rhetoric, Composition, and Literacy Studies, we can take advantage of the interconnected, sometimes blended, nature of the communicative modalities identified in NLG's pedagogy of multiliteracies. Asking a student to compose with audio-visual rhetoric is a separate assignment from asking them to compose multimodally using audio and video. Intermodal composition asks the writer to consider how the interconnectivity of these appeals will affect their composing processes and how the audience will receive the resulting message. The benefit of this approach to composition is the inclusion and exploration of hybrid modalities traditionally left out of the conversation such as audio-visual, gestural-spatial, and alphabetic-personal to name but a few. As I argue throughout this dissertation, intermodality is in no way meant as a replacement for multimodality but a complementary lesson that pushes the theory farther in our current technological moment. Intermodality calls attention to the cognitive abilities we always already employ to navigate the multimodal, discursive spaces throughout our daily lives, especially acts of composition. In this conclusion, I seek to ground this conceptual project in praxis-oriented implications by offering readers ways to teach and research intermodal composition moving forward.

5.1 Implications for Teaching

Historically, a breakthrough in research or update in technology rallies teacherresearchers to choose one of two extreme positions in a resulting debate regarding who we are, who we serve, and what we study. Intermodal composition provides a way to remix the academic conversations about multimodal composition to build on what we already know without encouraging a contentious paradigm shift based on an entirely new body of knowledge. In fact, typical assignments that are framed as multimodal composition can be adapted easily to include intermodality; teachers need only ask students to consider the interplay of the modalities during their composing processes and how their blended nature affect the final product based on audience expectations (e.g. reflective writing about their intermodal processes). What is gained through intermodal composition is a pedagogical refocusing on the process of writing using remix as a strategy for revision and reflection. Students benefit from this conceptualization because it gives them additional tools and strategies for composing in the era of social media, which is a time of constant multimodal, intermodal messaging. Intermodal composition pushes beyond the introductory lessons of multimodal composition to utilize rhetorically the interconnected, blended nature of the communicative modalities; it also changes the nature of assessment and evaluation, encouraging teachers to consider the processes of writing instead of only its products. Students will be able to craft better multimodal products using intermodal processes.

As I argue in chapter 1, multisensory metaphors offer a helpful way to introduce intermodality in the composition classroom because students employ them multiple times throughout the day. We already use words like "see" and "feel" in the vernacular to indicate understanding (e.g. "you see what I mean?"), and calling attention to these

metaphors as a thought experiment is a means to illustrate intermodality in the classroom. Some other examples for this exercise include discussing a writer's voice in alphabetic composition, a musician's ability to play by ear, and a rhetor's mental storyboard for video production.

Johnstone's intermodal apple experiment, which I unpack in chapter 3, would also be helpful in the composition classroom. Bring an apple to class and place it where all students can see it. Have them write about how the apple appears, what it sounds like when eaten, and how it might taste, smell, and feel. When students are finished with the writing exercise, tell them they have just engaged in psychological intermodality to experience sensorial expectations in their mind's eye via visual data and in operational intermodality to transfer those mental data from the personal modality into the alphabetic; furthermore, their writing on paper or screen now exists as material intermodality, a kind of multimodal archive of sensorial information. Their audiences will undergo similar processes and have their own sensorial expectations when encountering students' multimodal compositions, communications, or presentations. Process is a key consideration of this lesson, which lays the necessary pedagogical foundation for situated intermodality, the basis for intermodal composition; furthermore, this process-oriented focus shifts the field's tendency to conceive of rhetoric or multimodality solely based on the final product.

Reflection provides an effective way to explore psychological intermodality, which involves the subconscious, cognitive process writers engage constantly to shift their focus between competing sensorial stimuli. Ask students to reflect in writing about what they need to write effectively. What is the ideal environment in terms of ambience: sight, sound, smell, taste, and feeling (physical or emotional)? Embedded in their

answers are intermodal appeals. Whether or not they need complete silence or a full symphony in surround sound is evidence of their psychological intermodality. Many students will resonate with this exercise because they already have strong preferences for the environments in which they write effectively. The next phase of this exercise involves asking students how they concentrate to write when the environment is not ideal (e.g. a noisy dorm room or busy coffee shop); pointing out that their unideal ambience might be ideal to another writer is also a useful lesson. After the discussion, teachers should indicate that operational intermodality characterizes the way they consciously situate their foci to produce writing in an unideal environment. In fact, operational intermodality encompasses any conscious function that originates in the mind and becomes something material beyond the body, including digital artifacts, which must be accessed via material means (i.e. screens and speakers). With the thought experiment and reflective writing finished, students will have produced a useful example of material intermodality: their writing. By considering the multimodal trajectory of their mental processes, the result of their writing on paper or screen is a literal materialization of their intermodal thoughts. Situated intermodality considers the psychological-operational process and material product, whether printed, tangible, digital, remixed, or hybrid, as an interconnected unit. In accord with the rhetorical canons, all writing is a recursive dance between invention, arrangement, memory, style, and delivery that engages the interconnections between the communicative modalities; in other words, rhetoric or composition is always already multimodal and intermodal.

With intermodality sufficiently situated within composition, students will have the means to begin experimenting with the transfer possible among modalities and their commonalities of expression. This moment offers seemingly endless creativity for multimodal projects and a chance to redirect the multimodality myth to more progressive ends. First, students should be aware that multimodal communication and composition are always already operative in their writing lives instead of processes they can choose to engage at will; in other words, we cannot turn off a psychological process that is always on. Second, students should also be aware that multimodal composition is not synonymous with digital composition; in fact, multimodality can be found in printed, tangible, digital, remixed, or hybrid spaces. Last, students should be aware that literacy is at once print, digital, and everything between and beyond. The tendency of the field to place an adjective in front of the word "literacy" may be helpful for individual field of study (e.g. digital literacy or cultural literacy), but it represents a skills-based conception of literacy that breaks down when applied more globally. Literacy is a lifelong endeavor that expresses itself across multiple applications that do not fit nicely into one category or the other (i.e. print or digital literacy), and the study of intermodality reveals this complication.

Moving forward, to teach intermodal composition requires a willingness to look between the traditional boundary lines of multimodal composition for the continued discovery of these implications for teaching college composition and communication. Wherever or whenever we teach multimodality in the composition classroom, there are already chances for intermodal discovery through the added step of blending the boundary lines. Future application of this work for teaching involves the intermodality of the rhetorical canons and any taxonomy the field holds dear to ask ourselves and our students how their interconnected or blended nature affect the everyday work of teaching and learning composition.

5.2 Implications for Research

The multidisciplinary nature of this research widens the scope to include Rhetoric and Composition as well as Literacy Studies, splitting the theoretical focus and straining the capacity for in-depth inquiry, but doing so also yields opportunities for additional research. In the future, considering intermodal rhetoric or intermodal literacy within its own study would provide for a deeper dive into intermodality within the field's taxonomies: what are the intermodal connections between the rhetorical appeals or canons? What are the intermodal connections among various conceptions of literacy or literate practices?

The target population of this case study is comprised of first-year-composition students who have limited exposure to multimodal composition. These students represent a sensible starting place for intermodal discovery; however, future research using this approach to situated intermodality could study advanced undergraduate or graduate students who have a stronger theoretical understanding of multimodality. Such a target population could provide greater insight into the multimodality myth because participants would have more exposure to the exaggerated circumstances and unrealistic expectations that often accompany pedagogies of multiliteracies and multimodal composition; these students would be able to report if they have learned that their writing is always already multimodal, that multimodality includes the tangible or material, or that multiliteracies are hybrid (at once printed, tangible, digital, and remixed). Listening to what advanced undergraduate or graduate students have to say about multimodal composition and the multimodality myth would provide new avenues for the study of intermodal composition.

Because intermodal composition is a new endeavor, testing and researching it in the field is important for advancing this theory and putting it into practice; however, participants would need to learn about situated intermodality beforehand either in the classroom or through the research process. As I indicate in chapter 2, I decided not to address intermodality explicitly with participants in this case study to avoid overwhelming them with excessive terminology, but this limitation points to possibilities for future research with participants who understand intermodality as a component of multimodal composition. Once a target population has knowledge of situated intermodality, researchers can begin testing the efficacy of intermodal composition theory.

Additional multidisciplinary research on key terms from psychology and their implications for composition is necessary. Intermodal perception or intermodal matching represents a conversation that teacher-researchers could enter by contributing and reexamining what they already know about multimodal composition. Intermodal matching affords opportunities to research how we perceive the emotions of others via body language, vocal cues, and facial expressions. Intermodal perception, which Johnstone's apple experiment utilizes, affords opportunities to research how audiences perceive observed objects as having sensorial data without themselves directly experiencing that data; teacher-researchers in Rhetoric, Composition, and Literacy Studies could expand this academic conversation in myriad ways. We can transform these experiments and others from psychology using acts and products of composition instead of the sensorial stimuli psychologists depend on for their studies of intermodality with infants and toddlers.

By shifting our pedagogical focus to the margins between modalities, we can mitigate current ideological debates, resist broad paradigm changes, and move the discussion away from the final products of multimodality to its processes for making meaning: intermodality, which I define for the study of composition as the interdependent cooperation of modalities. The academic separation of the senses to study the modalities independently (e.g. visual rhetoric or sonic literacy) is a helpful exercise; however, considering the fluidity and interconnectivity of modalities, like the field does for the rhetorical appeals and canons, is also important for a more complete understanding of multimodal composition.

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APPENDIX

I offer the following profiles as a brief introduction to the research participants "to make explicit how [they] experience multimodal compositions and how those experiences are shaped by expectations from other genres and other media" (Bowen and Whithaus 2). Seven participants identify as female and one as male—all identify themselves as traditional students except one. Most of the participants were born in the United States; however, one student is Vietnamese American, and another is Malaysian American, providing transnational perspectives for the study of intermodality in multimodal composing practices.

Dawn is majoring in Finance and Accounting. Family is important to her multiliterate identity. Throughout our conversations about multimodal composition, Dawn talked about using the concept to communicate with her family: her husband being bilingual, her 3-year-old daughter learning to spell in two languages, and her son graduating college. She has an interest in blogging and enjoys reading, collecting cookbooks, cooking, and baking.

Valery is double majoring in Psychology and Philosophy. Diversity is important to her multiliterate identity. During our time together, Valery discussed being a Catholic Vietnamese American in terms of multimodal communication, especially regarding Vietnamese dance festivals in the United States. She has an interest in voice acting and enjoys musical composition, dancing and choreography, video production, and creative writing.

Zara is majoring in Political Science. Diversity is important to her multiliterate identity as well. Zara shared her experiences with multimodal composition as a Malaysian American. Zara and her friends in Malaysia employ three languages as well as

emoji in their text message exchanges. She has an interest in creative writing and enjoys roleplaying on social media platforms.

Pabla is double majoring in Philosophy and Music. Family is important to her multiliterate identity. While discussing multimodal composition, she talked about using the concept to find creative ways for communicating with her younger siblings. She enjoys playing the violin professionally.

Geoff is majoring in Marketing. Brand identity is how he characterizes multimodality for his field and is important to his multiliterate identity. During our meetings, he mentioned his French background in reference to his proclivity for gestural communication. He has an interest in art culture and enjoys creating an art collective with his friends.

Amelia is majoring in Media Entrepreneurship. Creativity is important to her multiliterate identity. During our conversations, she offered jewelry making in response to questions about using multimodal composition in her daily life. She attended music college for performance and composition and enjoys arts and crafts.

Phoebe is majoring in Music Industry. Family is a significant part of her multiliterate identity. She discussed using multimodal composition to keep her nephew's attention on their conversations. She has an interest in science and worked in film for six years before college.

Maggie dropped out of the study after the focus groups, giving permission to use her research contributions. She enjoys handicrafts like knitting and crochet.