MULTIMODALITY AND TRANSMODAL MOMENTS IN THE SECONDARY ENGLISH CLASSROOM:

UNPACKING CHAINS OF SEMIOTIC MEANING

by

STEVEN J. LANDRY

(Under the Direction of Bob Fecho)

ABSTRACT

This study investigated what occurred when four tenth-grade English Language Arts students transacted with a multiliteracies pedagogy. The study was designed using a social constructionist framework with an emphasis on multimodal meaning-making. Data were generated during an approximate two-week period and included audiovisual recordings, field notes, and student artifacts. Using a microethnographic approach, data analysis identified how multiple modes were used in conjunction during three key, brief events. Implications derived from the findings suggest literacy educators focus more on non-traditional meaning-making events beyond standards-based expectations. Additionally, modal preferences are based upon a variety of group membership and personal preference factors.

INDEX WORDS: secondary English Language Arts, multimodality, multiliteracies, literacy, The New London Group, microethnography

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UNPACKING CHAINS OF SEMIOSIS

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CHAPTER 1

INTRODUCTION

I was a few weeks into the spring 2015 semester, both at my high school and at the University of Georgia. Working towards a doctorate in Language and Literacy Education brought many research opportunities. I kept a journal online, set to private, albeit shared with a co-writer and mentor, Trevor Stewart. We investigated how I, as a practicing teacher, engaged in a dialogical pedagogy (Fecho, Whitley, & Landry, 2017) within the Standards Era classroom (Nichols & Berliner, 2007) – one where students bring themselves into dialogue with each other, the curriculum, and the world around them in an effort to construct meaning. In the journal, I would reflect for approximately fifteen minutes each day: what happened, who was involved, and how I observed our collective meaning-making processes.

It was during one of these reflections that I wrote about one student's blurted responses that began to take on a life of its own for me. Rex, a fifth-year senior, was a white, rural teenager whose life, at least as he was concerned, had already been spelled out: he was to be a professional bass fisherman – sponsored by major brands and financially secure. Academics were not his calling despite his propensity for analysis and critical thinking skills. Rex was an interesting mix of headstrong, clever, and sarcastic. In this respect, we got along well. But, he was easily identifiable as one of our school's most "at risk" students – according to our guidance office and administration – due to his problematic behavior in and out of the classroom, his low socioeconomic status, and his missing academic credits.

Rex was loud and brash, but always aimed towards entertaining the class. He lived with his girlfriend, having been kicked out of his father's house. His mother wasn't in the picture. Rex craved attention and liked to go against the grain to get it. Sometimes this would create friction, but more often than not, his likely goal lay in entertaining others through an exaggerated – *even* for Georgia – Southern drawl. He was immediately likable to me, but an acquired – if ever – taste for other teachers in the building.

The day before, we finished the introduction to *Beowulf* in which Grendel had begun his bloody twelve-year-assault on Hrothgar's renowned meadhall, Herot. As a summarizing strategy, I was leading students through a PowerPoint review of the key plot events, setting details, and characterization. Students were recalling Grendel's demonic and Biblical lineage when Rex blurted out, "Hashtag Team Satan!" The class came to a quick stop.

In a school and county where many identify as conservative Protestant Christians, Rex was going for another laugh. Despite the class being used to antics like these – some spent more than four years getting to know Rex – he got several laughs, including one from me. Although he was likely trying to ruffle feathers with his sarcastic satanic exaltations, the significance of his utterance didn't register until I started to process my thinking through writing. Why did Rex reference an online, text-based convention of Twitter, Facebook, and Instagram through speech? This application wasn't entirely new: I had worked with Joe, a fellow graduate student, who used gesture to indicate hashtags *with* speech, but this was different. This was a student making meaning through an online text-based convention, but using his words, his projection, and his charisma to deliver a joke, ripe with connotations.

I have to admit, hashtags are a strange phenomenon. If I were to transcribe what Rex shouted using contemporary Internet-based discourse, I would share that he said: #teamsatan. For

an unfamiliar eye, this use of what I was previously taught was shorthand for the number sign or the pound sign on a touchtone phone, has become a literal tool for connections. The hashtag, as a digital tool in its original domains, can function in several ways: like words in parentheses, it can share additional, but not necessary information, e.g. alongside a photo of the beach: #summer #beach #finally. It can be used ironically, e.g. alongside a Facebook status update: "Cruising for chicks" #idonthaveacar #idontstandachance. Or it can be used as it was intended, to link information to other similar information, e.g. at professional conferences: "Learning so much" #ncte2017 #literacies. Simply put, each time a hashtag gets used, it becomes literally linked to previous modes of communication within whatever online platform it originated. It's a quick convention for organization and structure that provides a link to similar information.

In this respect, Rex was doing nothing novel. He linked new information to previous knowledge and contextualized canonical literary information as he constructed meaning. This is, after all, a *primary* goal of teaching. In other words, what was so different?

Rex *did* do something different; he used it in speech, instead of typed text through digital means, Rex *figuratively* used an online convention to link knowledge from the previous day to our moment during an anticipatory review. This shift in mode, from a digitally print-based convention to verbal utterance, arrested my attention. What prompted Rex to make meaning in this particular mode? Another way to say this is, what resources in our classroom were available and used at that moment? Or, how was my classroom *designed* that day? We were using the projector, a computer, and a PowerPoint presentation with images and bullet points. A number of elements might have contributed to this brief moment in time.

Was it the black slide background with red writing and a violent image of Grendel stalking a victim that worked in concert to inspire evil thoughts in Rex? Was it the unique combination of what I asked – emphasizing a guttural Monty-Python-esque, "Grrrendel," how students responded, and Rex – texting his girlfriend on a not-so-hidden cell phone during class – that created an opportunity for different modes to be used? Or, was it the combination of modes – speech, text, my monstrous gestural impressions, Grendel's image, colors indicative of violence, the digital layout on the screen, and the dim light of the room – that prompted Rex to create a modal shift in how he made sense of *Beowulf*'s conflict? Although I can't narrow down the specifics, I have a hunch. This hunch is representative of my current research interests and the lines of inquiry this dissertation follows. What continues next is an overt explanation of this personal and professional inquiry.

Rex made an utterance in class constituted by three words and five syllables; so, what? This serendipitous moment from class blazons several significant facets of my research. It links my interests in the philosophical understandings of how meaning gets made, my pedagogical practices, what the state of Georgia has standardized as a curriculum, how my school system interprets the state's expectations for what constitutes learning, and how students and I transact across modes. What was likely an utterance intended for humor has become fixed as a representative moment in time across different modes with varying degrees of meaning-making affordances and limitations. This moment, contextually, represents a student pushing against his surrounding culture in which loud blasphemes serve to slightly offend and create tension, yet are opportunities to view the world differently. But the original investigation, tracking the daily happenings and observations in a journal, framed Rex's utterance in new terms for me.

Rex's hashtag had me thinking about the complexity of meaning-making, specifically in connection with my research interests: multiple modes (Jewitt, 2011; Kress, 2011), the rigid expectations of the Standards Era classroom (Nichols & Berliner, 2007), a *designed* social justice oriented pedagogy (Fecho, 2004; Gee, 2008; Ladsen-Billings, 1995; The New London Group, 1996), and – most relevant to this dissertation – how socially constructed meaning (Berger & Luckmann, 1966; Burr, 2003) gets made by a particular set of students. The issue of *design* was sparked by Rex's hashtag and, later, his initiated action helped me bring design as a central concept of my pedagogy. Another way to say this is Rex started an action – I started to think about design – and the chapters that follow this story better explain what I've learned about the nature of design, multimodality, and the transactions within the secondary English Language Arts classroom. But in order to get to the story of my question, I unpack certain assumptions, pose many questions, and provide a roadmap of my thinking.

Within this chapter, I outline my personal and academic investigation into how my experiences as a learner define my research problem. Then, I share how the research problem has been addressed in the literature, albeit briefly. Next, I unpack my research questions along with a brief overview of the study. After then discussing the significance of the study, I provide a direction that charts several lines of inquiry for my writing.

Personal and Professional Preamble to the Problem

First, in unpacking my experiences with the ways in which stories get told – whether through speech, writing, images, recorded audio, video, or the innumerable combinations – I intend to accomplish several tasks. After I position my epistemological outlook on meaning construction through personal accounts, I outline the inquiry that this research follows: despite a well-developed call for social justice pedagogy through a multiliteracies approach by the New

London Group (1996) over twenty years ago and repeatedly echoed throughout the literature, the current standards-based environment within American secondary public schools creates tensions that privilege print-centric (Alvermann & Wilson, 2011) texts and writing structures over the ways through which the students I teach make meaning in their daily lives.

I next synthesize the existing theories on how language (Gee, 2008; Burr, 2003), multimodal communication (Jewitt, 2011), and the pedagogy espoused by the New London Group (1996) get taken up to socially construct meaning (Berger & Luckmann, 1966) within the secondary English Language Arts classroom. An ancillary complication within this environment stems from the one-size fits-all approach (Fecho, 2004; 2011) all too common in contemporary Language Arts education. White, privileged, middle-class speakers of Standard Edited English and their multimodal literacy practices get used as patterns for what to read, how to write, and even how to think – given all that is attached to language (Gee, 2008).

But prior to the critical and advocatory work of this study, in the following section, I start by unpacking my ties to various media and how my developing literacies were formed. I highlight this exploration as problematic due to the way I interpret how individuals make meaning and how adolescents are currently assessed by state-sanctioned practices in the Standards Era classroom.

The Story of My Question

The power of narratives, regardless of mode, has always captivated me. At a young age, I watched television shows and movies, listened to music, played video games, and read profusely. Instinctively, I knew that stories were told in multiple forms and through multiple modes. Of course, I didn't have a vocabulary to effectively share my understanding of this. But even though

my metacognitive perception was limited, I still saw connections, derivations, and patterns of characters, plots, and settings seething beneath the surface of these texts across different media.

In elementary school, my mom took me, weekly, to the local library in Columbia, South Carolina. When not playing puzzle games on the public computers, or listening to a local volunteer read aloud, I used the library for its obvious purpose. I would check out stacks of books; sometimes the books were classics of children's literature and – at other times – I would simply borrow the same books again and again. A favorite, Marcia Williams's (1991) *Greek Myths*, combined comic style illustrations with the author-illustrator's own take on classic mythology, albeit made apropos for a children's audience. Seeing the juxtaposition of words and images in sequence made for a unique meaning making experience (McCloud, 1993). Like many, I was captivated by narrative action, adventure, suspense, and the bizarre. I still deeply respect the variegated comic forms, dubbed *graphica* by Terry Thompson (2008).

Because of these visual interests, another repeated check out was Alvin Swartz and Stephen Gammell's (1981) *Scary Stories to Tell in the Dark.* The short stories were from traditional folklore and – on their own – not anything too special, but Gammell's charcoal sketches *terrified* me. The visuals, when added to the text, haunted my dreams and Gammell's phantasmagoric illustrations were my secret boogeymen; I keep a set on my classroom reading shelf in hopes of inciting the same thrill in those I teach – even if they're an older audience. Again, it was the pairing of image and text that created a response and a visceral feeling through a *combination of modes.* If it was my mother's disposition towards books that fed my imagination through stories in multiple forms, it was my father's love of adventure through space operas like *Star Wars* (1977) and literary treks like *The Hobbit* (2012) that sparked a love for story. My parents fed my

narrative desires, but I still couldn't understand why I was so engaged. What was it about reading a new, but somehow familiar story?

It wasn't until my dad loaned me a copy of Joseph Campbell's (1947) *The Hero with a Thousand Faces* in high school that I started making overt theoretical connections between stories, tradition, and the impact of technologies on how stories get told. No longer was I thinking in terms of how one character was merely like another, but that there was a pattern beneath characters. Furthermore, the plots of some stories seemed to have a lot in common. I came to realize that character types, plot threads, and motifs get taken up by authors and belong to historical, individual, and group ways of making meaning.

At that age, I was astounded by the connections between Campbell's monomyth, or what I call the basic pattern of the hero quest whose threads were through all of the hero stories I had read, watched, or played. I saw literary connections between this, hero stories in popular culture, and my childhood favorites. Although Campbell took a sociological perspective and analyzed chiefly mythological and significantly older texts, it was director George Lucas's application of the basic pattern and motifs to a space opera that caught my interest. I would later learn that this was not coincidence, but an intentional use of this pattern – Campbell once said that Lucas was his best student on account of *Star Wars*'s implementation of Campbell's ideas.

Regardless, I was caught up in the idea of how older stories influenced contemporary stories. Inspired by this new understanding, I started finding connections among Greek theater, Norse mythology, movie trilogies, the literary canon, and "lowbrow" comic books. Campbell was the first of many scholars to influence my thinking about the gears at work behind stories, storytelling, and how we gather and construct information.

To offer an additional example, emblematic of narrative power and how they are told across multiple modes, players of the *Legend of Zelda* (1986) series might recognize that the same basic story gets told again as video game consoles improved. A princess gets kidnapped – the story goes – and a hero helps save said princess and beat the evil plaguing the land. Even the character names get reused, but that hasn't stopped the series popularity: an estimated 69.18 million games have been sold in their original form, remakes account for an additional 14.76 million, and there's no way to estimate illegal download across devices starting on home computers and eventually on smart phones (Video Game Sales, 2017).

As technology improved, the game was not only retold, it was *redesigned* – and *design* is a central idea for the New London Group (1996) to be addressed in Chapter Two of this dissertation. Limited to eight-bit-graphics, the Nintendo Entertainment System (1985) often had views that were top-down with simple animations and character sprites. The controls moved the main character only in cardinal directions. For the Super Nintendo Entertainment System's edition (1991), the movement doubled directionality and the view became relatively isometric, in addition to advances in character sprites, animations, music, and soundscape design. With the proliferation of the Nintendo 64 (1998), harnessing sixty-four-bit graphics and displaying a three-dimensional view new to the franchise, there wasn't a mere improvement in the looks of the same story. Sound design, Foley art, coordination across three dimensions, and more responsive manual controls changed the way stories got told and – significantly for my research – *experienced*. Although I didn't have words for it at the time, I was developing tentative theories about narratives and multiple modes that my later education would give me a voice to share.

From my childhood experiences, I have come to realize that I never simply read, listened, or watched stories in a sterile vacuum devoid of external and internal influences; I was making

meaning through many senses, impacted by my cultural context, understanding of the world, and developing analytical toolkit. Whether it was a library volunteer, reading aloud and embodying a character through gesture, voice and picture, or my time spent playing video games, like *The Legend of Zelda* series – an art form harnessing sound, three dimensional visuals, player choices, and on-screen text – I learned that there are connections between how stories are told, the modes harnessed by creators, and how meaning gets made by consumers. Connectedly, the most recent version of the game, *Breath of the Wild* (2017), changed the interactive design: no longer is the main story as necessary, since players can use the sandbox environment for exploration and ingame challenges get solved in ways that even the designers didn't anticipate.

Earlier I mentioned how experiences function for people in general; however, I failed to mention the personal significance of doing so for this paper: in my story, I followed in my parents' footsteps and became a public school English Language Arts (ELA) teacher. Although I love working with adolescents – and probably have more childish fun with stories than most of the students I serve – it's the power of narrative and the combination of modes that are of significance.

But to share the role that experiences and the connections they share in regard to form and function, I turn towards what I see in the classroom and how my pedagogy gets informed by my past. Donald Polkinghorne (1988) claimed, "Experience is meaningful and human behavior is generated from and informed by this meaningfulness" (p. 1). Through sharing my professional experiences and my approach to teaching secondary ELA, I make three major points: experiences are central to our meaning-making processes, these stories get told through combinations of modes, and the contextual significance of belonging to groups of people across meaning making processes impacts how we experience the world.

Professional Experience

Because of my upbringing, I frame my approach to teaching through a passion for narratives, fostered by my cultural influences, and the ongoing influence of personal experiences. At work, I harness my history as a young consumer of story, regardless of mode, to influence how I teach, scaffold learning activities, and approach the meaning-making experiences I design (The New London Group, 1996) for my high school classes. My favorite stories and preferred combinations of modes influence my instructional decisions. To emphasize this, *my collective and ongoing experience* informs my pedagogical design. But, what of the students' experiences? Fecho and Botzakis (2007), while espousing the need for student experience to dialogue with secondary ELA curriculum, noted that the ELA classroom, due to the potential for tensions, "is a complex space, one that is fraught with possibilities and pitfalls" (p. 550). Tapping into student interests and experiences offer more possibilities; standardized curriculums and pacing guides offer more pitfalls. As such, without addressing socioeconomic and cultural factors during curricular decisions and classroom activities, more pitfalls than possibilities await.

As a result of different experiences, students have their own sets of preferred narratives, toolkits for reading the world (Gee, 2008), and culturally influenced modal affordances and limitations (Lemke, 2011) to share the meaning they've socially constructed (Berger & Luckmann, 1966) that impacts their burgeoning understanding of the world. Thus, there's a stark contrast: I have a solid – albeit perpetually incomplete – understanding of how I make meaning, but what of my students? How metacognitively aware are students of their multimodal capabilities as meaning makers? Furthermore, how aware are educators of how multimodal meaning making unfolds within the secondary ELA classroom?

The significance of the following section outlines the importance of multimodality as a lens for my research inquiry. Harry Wolcott (2002) offered that "[theory] should not be regarded as just another ritual" or "another obstacle" (p. 96). Rather, I want to ensure that the "material" I am "introducing is well in place," situating my problem within the body of knowledge, and contextualizing my work across several theories (p. 96). I next shift to a preliminary explanation of multimodal theory, which will be more greatly expanded in Chapter Two's theoretical framework.

Beyond Books, Words, and Static Images: Linking to the Theory

Stories and, ultimately, experiences get constructed and shared through a combination of modes. Furthermore, the meaning-making process is a result of these modes used in conjunction. I believe what Carey Jewitt (2011) asserted: there is no "monomodal culture," because individuals construct meaning using a combination of modes (p. 4). Jewitt (2011) posited that "multimodality approaches representation, communication and interaction as something more than [written or spoken] language" (p. 1). Individual modes, specifically within the secondary ELA classroom, have been and continue to be studied alone; however, humans make meaning through modes used in conjunction. The isolated study of a single mode was not the goal in this study.

Gunther Kress (2011) shared that a mode is an "image, writing, layout, music gesture, speech, moving image" and "soundtrack" which are used in combination as different vehicles for "representation and communication" (p. 54). Each of these "semiotic resources" can be intentionally or unintentionally employed in order to reach specific audiences for the purposes of making meaning (p. 55). Therefore, individuals read and write, or – more appropriately – consume and respond, using a combination of multiple modes. Imagine how a friend might recount

getting cut in line during a recent trip at the grocery store. This friend wouldn't recount the episode in words alone. They may use gesture, body posturing, voice impersonations, and gaze to reconstruct and share the experience. To reiterate, meaning gets constructed through multiple modes and shared through preferred combinations of modes based upon the sign-makers preferences.

This concept of multimodality fuels my understanding of how I make meaning in the world around me and how I try to frame my practices as an ELA teacher in a secondary public school. But there is more to instruction than delivery of the curriculum. How students construct meaning is contingent upon socioeconomics and factors relating to Discourse membership (Gee, 2008; Lemke, 2011). These issues are more thoroughly explored as I next unpack the research study itself: in the Standards Era Classroom, there is a disconnect between what the theoretical and empirical research shares about how individuals learn through multiple modes and the narrow, state-sanctioned definitions of literacy I see enacted through pacing guides and mandated curricula. Herein explicitly lies a complication between what has been theorized and researched and how this cumulative knowledge becomes embodied through policy, curriculum decisions, and what research could have followed specifically for the secondary English Language Arts classroom. This disconnect anchored my research inquiry, which gets more clearly defined in the following section.

Statement of the Problem: Direction of the Inquiry

My review of the literature, which is more deeply explored in Chapter Three, found many conceptual and theoretical publications addressing multimodality, multiliteracies, and critical literacy practices. However, only some empirical studies have been conducted that corroborate with this study's line of inquiry; without overt multimodal instruction and more empirical data

for how different modes are enmeshed among groups of students and academic expectations through standards, students are not explicitly taught the multiple literacies they need to be successful later in life, nor are their learning potentials being appropriately engaged and met (The New London Group, 1996). Further compounding this problem is the narrow view of literacy – addressed next – that can occur within the Standards-Era Classroom and the assessments used to measure learning success.

Standardization and the Narrowing of Curriculum, Instruction, and Assessment

As a secondary English Language Arts educator, having taught nearly a decade in the classroom, I have already seen a number of significant changes – shifts in expectations, available technologies, and society – impacting my students' experiences in a secondary Georgia public school. Within the past ten years, Georgia's English Language Arts standards have also changed. In 2007, Georgia's Quality Core Curriculum (QCC) standards for students shifted to the Georgia Performance Standards (GPS). Those have given way to Georgia's more recent adoption of the Common Core standards (CCGPS) in 2010 – as of publication, these are still in place.

My analysis of the standards themselves has shown that the expectations have become more skills-based and less text-based. Less important are canonical texts and teacher-centered pedagogical approaches, more important are how students approach reading tasks, make meaning of said texts, and construct responses. These are admirable, equitable, and valuable goals by which I set standards for my students.

However, in an effort to improve the learning environment, misguided policies have led teacher accountability to trump creativity. In Georgia, Federal *Race to the Top* funds were not spent on students, but on a new teacher evaluation system including personnel training, software development, and teacher calibration. To put this another way, in order to fix a perceived broken

educational system, state officials deemed that we need to fix the educators and their approaches. Another change occurred with what I perceive to be as negative consequences: the use of a new assessment system, the Georgia Milestones, have pigeonholed writing responses to argumentative, informational, or narrative, as if the genres are stagnant and discrete. Thus, in this paradigm, the view of what counts as teaching and learning has been narrowed as a result of No Child Left Behind (Nichols & Berliner, 2007) and how individual states have responded to the national legislature.

In a 2014 study, Lee saw how the classroom implementation of DIBELS (Dynamic Indicators of Basic Early Literacy Skills) contributed towards a limited view of literacy. I, too, have seen how Scholastic's Lexile scores – originally intended to pair students with self-selected texts based upon a numerically assessed literacy score based upon an algorithmically derived formula – dominate curricula decisions. We measure students regularly using a tool originally intended to pair student ability with texts, rather than simply pair our students with texts.

To provide another example, Steinbeck's (1937) *Of Mice and Men*, previously taught in ninth and tenth grade literature courses, scores a 630L. However, MetaMetrics (2016) – the company responsible for disseminating information on Lexile scores – asserted, "[students] in these grades should be reading texts that have reading demand[s] of 1050L through 1335L to be college and career ready." Should so-called objective systems based upon linguistic algorithms determine the "difficulty" of a text for curricular decisions? I don't think so, because the art and science of teaching English Language Arts goes beyond standardized test scores and other numerical measurements. Assessments arriving at quantitative measurements without additional qualitative descriptions or explanations do not inform instruction; rather, they provide a reductionist and fragmented view of a very complex set of skills and knowledge.

Similarly, the Georgia Milestone Assessments for Ninth Grade Literature and Composition, a course I teach, privileges three forms of writing: narrative, informational, and persuasive. This has led my department to develop lesson plans that focus on two overtly taught literacy skills: annotation of documents and synthesis writing which incorporates information from select documents. While I agree that these are necessary skills that prepare students for their future, teaching to a test exacerbates this problem: a narrow view of literacy stifles contextually creative approaches and can nearly eliminate a social justice oriented multiliteracies approach. Another way to say this is that a narrow view of teaching and learning perpetuates a narrow view of what counts as literacy, what knowledge counts as important, and what skills should be valued. It also perpetuates a narrow view of embodied curricula and curriculum is a site where students and teachers transact.

Connectedly, American public schools have become spaces where teachers feel pressured to use scripted curricula and pacing guides (Stewart, 2012). Traditional notions of literacy continue to be privileged by the dominant Discourse. In other words, speakers and writers who use Standard Edited English get their literacy practices preferred by the powers that be (Gee, 2008). Often those powers are the ones dictating policy at a federal, state, and local level. Gunther Kress (2005) called this the "long domination... of writing as the culturally most valued form of representation" (p. 5). Of course, the written word is important; this study – and every cited text before it – would be impossible without it. However, such weight upon solitary modes ignores the multiple ways that we make meaning out of our experiences in and out of the classroom.

Even more valued than this particular view of teaching and learning, in my experience and in the literature, is the role of quantitative standardized assessments. From the local board of education office to ELA departments, numbers drive instructional decisions. Several studies

point to this notion: the problematic reliance of quantitative measures in regard to student achievement and teacher effectiveness assessment. Stecher, Barron, Kaganoff and Goodwin (1998) asserted that lower educational outcomes stemmed from teaching to the test, an effort to improve qualitative test scores in Kentucky. Lara (2001) noted that academic proficiency through grades and test scores provided an incomplete picture of success or failure. Additionally, Au (2007, 2011) found that the impact of high-stakes testing and standardization negatively impact the approach to curricular decisions and, therefore, the learning that takes place in classrooms. Relatedly, Grossmann, Loeb, Cohen, and Wyckoff (2013) noted the impracticality of using teacher effectiveness scores - confined by this narrowed view of standardized assessments generated more concerns and questions than provided conclusions about student achievement and teacher ability. Therefore, a narrow emphasis on numbers and standardization (Cazden & Dickinson, 1981; Fitchett & Heafner, 2010; Hursh, 2001; Wills & Sandholtz, 2009), tends to trump more individualized social, cultural, and critical approaches to teaching in favor of numerically justified text selections and a style of writing valued by testing companies with fiscal priorities over developing democratically-minded and critically thinking citizens.

What's even more complicated than having standardized approaches to teaching is that views of learning have become standardized in an effort to improve the numerical outcomes of exams. Fecho (2011) asserted that this "teacher-as-recipe-follower" is a problematic metaphor because this approach does not help professionals reach the individual needs of the students (p. 2). The focus becomes the presentation of material, rather than how that material gets received. This reminds me of Jean-François Lyotard's (1979) suspicion of grand narratives – the tacit theories we use that "explain" everything – and his distaste for *consensus*: if all parties agree, is progress being made?

Without the natural tensions of tentative theories and contextually *designed* lesson plans allowing space for uncertainty (The New London Group, 1996), static "facts" about conventions, literary devices, ways of writing, individual author intent, and unchanging themes get taught. Students are led to think in binaries – "pick and argue a side" – and choose the best options on a selected response. What should be a dynamic process of learning gets reduced and the experiences, productive tensions, and more individualized lessons get lost as well. Even more dangerously, long held "truths" about groups of people, ways of thinking, and issues of class, race, and power remain unquestioned. In short, a standardized approach used in many schools today contrasts sharply with my literacy experiences as a learner and my continued development as a teacher-researcher.

In my current teaching environment, many teachers have not truly shifted towards answering the call for a multimodal pedagogy, or the "need to help students become more aware of... ways of working across multiple modes of communication" (Bowen & Whithaus, 2013, p. 2). Instead, I see teachers using company-contracted rubrics to assess writing – writing based on state-sanctioned prompts valuing specific ways of responding and assessing standardized curricula. This again narrows the view of what constitutes literacy. In other words, the expectations for how teachers design learning opportunities for student meaning-making do not reflect the current understandings of multiple literacies and multimodality (The New London Group, 1996; Jewitt, 2011; Newfield, 2014). However, simply learning about multimodality does not ensure that teachers get past standardized instruction and recipe following.

Pedagogies, through a multimodal framework, work better when they are individualized and culturally responsive rather than following the monological imperatives within our contemporary top-down approach to teaching and learning. While attending to these issues, there is a

pronounced lack of research specifically exploring multimodality within the secondary ELA classroom. This gets embodied through what the nation, state, and local bodies of education assess as literacy.

State-sanctioned assessments are still designed with an overt emphasis on traditional definitions of reading and writing (Alvermann & Wilson, 2011) despite massive shifts in communication, increased global interconnectedness through technological advances, and recognized modal affordances and limitations (The New London Group, 1996; Kress, 2011; Lemke, 2011) across cultures. In the following section, I outline a specific framework for understanding the significance of a multimodal approach in addition to reinforce what I've identified as the problem: student potential gets stifled by standardized approaches and narrow views of literacy. However, my Master's and Graduate studies led me to find a touchstone publication that not only connects to my own understanding of multimodal meaning making as has been unpacked in this chapter, but how a pedagogy influenced by this approach benefits students.

The New London Group and a Call for Multiliteracies

Although the article's publication was twenty years ago, The New London Group's (1996) "Designing Social Futures," tackles the very problem I see in my own school: multiliteracies inequity stemming from poverty and systemic problems within our public educational industrial complex. Similar to my observations, the ten authors of the New London Group (NLG) identified socioeconomic inequalities as a result of contemporary education and capitalist practices that limited the opportunities of students. Meeting in 1994 in New London, New Hampshire, the ten authors first wanted to influence "the idea and scope of literacy pedagogy" as they identified increasingly globally connected societies and also to "account for the burgeoning variety of text forms associated with information and multimedia technologies" (1996, p. 61). The

world was changing, increases in technology and updated understandings of communicative properties were creating a world more interconnected through language, image, sound, and video. New combinations of modes created new possibilities and pathways for learning. Would public education meet the needs of learners during this sea change?

The ten authors agreed, "the disparities in educational outcomes did not seem to be improving" (1996, p. 63). However, sharing a background in English-speaking countries helped establish a new direction: "what students needed to learn was changing" and that this change should reflect that there "was not a singular, canonical English that could or should be taught anymore" (p. 63). Reading and writing were oversimplified terms; instead, *multiliteracies* was adopted by the NLG in order to capture the progressive developments in literacy research and pedagogies. They asserted literacy, as a singular term, implies "language only" instead of the complex and recursive modes through which people read the word and the world (p. 64). Thus, the NLG proposed new guidelines for how literacy educators view themselves, their students, and their approach to instruction.

The NLG (1996) used their own ontological perspectives, discussions, and prior research experiences to publish a "programmatic manifesto" espousing a need "to engage in a critical dialogue with the core concepts of fast capitalism...[,] emerging pluralistic forms of citizenship, and of different lifeworlds" in order to form a "new social contract" and "a new [global] common-wealth" (p. 73). The essence of their publication is simple: communication changed, modes of communication will continue to change, and ways of teaching and learning need to reflect this change. More of their impact will be discussed in Chapter Two, my theoretical framework, and

Chapter Three, reviewing the impact of the NLG on empirical and advocatory studies, conceptual literature, and how multiliteracies approaches informed multimodal literature on body of research.

Therefore, a pedagogical approach like the NLG espoused – one of equality, representation, and social justice through learning opportunities designed to engage multiple literacies – has yet to be fully realized beyond conceptual articles, post-secondary composition classes, and primarily non-U.S. settings. The metaphor of rolling out a new update is apt. Post-secondary composition scholar Jerome Bump (2013) similarly noted that "print has been steadily replaced by electronic media, words by images, and literature by movies, television, computers, and video games" and literacy educators must shift pedagogical practices "from the old to the new operating system" (p. 111). Instead, in my experience, traditional definitions of literacy continue to be taught, assessed, and valued.

My experience as a child, adolescent, and adult teacher has shown: literacy is not as simple as reading and writing the written word. Literacy is multimodal and includes gaze, body movement, posturing, visual communication, audio, and much more. As a result, multiple literacies, or multiliteracies, has proliferated as an approach to pedagogy (The New London Group, 1996). Meaning is socially constructed through multiple modes in conjunction through a seemingly infinite variety of ways – including the impossible-to-know-yet ways to be fully realized. Meaning making is highly contextual and resistant to recipe teaching. This led to two issues that sparked this study. First, the empirical research within my research setting left space for more work. Second, a narrowed view of what counts as literacy (Stewart, 2012), helped to define the purpose of this study.

Research Questions and a Brief Overview of the Study

The purpose of this study was to gain insight into how secondary students in a Southeastern American public school used multiple modes as they constructed meaning through multimodal composition within the Language Arts classroom. Despite the prevalence of a standardized approach informed by quantitative test measures, this study describes and interprets how meaning was made in this complex context. By centering on events during an approximately two-week window of time within our secondary English Language Arts classroom, this study unpacks the seemingly *invisible* transactions students make. Using data generated from audiovisual recorded student interactions, transcriptions of video, student artifacts, and research notes and expanded journals, I explore the various aspects of multimodal meaning making efforts as they unfolded across brief moments of time through the punctuations across chains of semiosis during three salient transmodal moments.

More specifically, this study integrated microethnographic methods (Erickson, 1982; Dillon, 1989) in order to see how student-generated texts, conversations, and events transacted through multiple modes. This approach afforded me the chance to consider what happens temporally across chains of semiotic meaning as student understanding gets constructed through my unit of analysis, Newfield's (2014) transmodal moment. Newfield's unit functioned well in unpacking multiple modes as students shift multimodal meaning practices across time – even a period as short as thirty seconds. Essentially, student identity, meaning making across time and modes, and an overt approach to teaching multimodal meaning-making were better understood within the secondary ELA classroom as a result of this study. But, what will get explored, specifically?

Research Questions

- 1. What happens when students construct meaning through multiple modes and what are the implications of studying a multimodal pedagogy for English Language Arts?
- 2. What occurs during transmodal moments (Newfield, 2014) and what are the implications of analyzing such moments for the classroom?

Significance of the Study

This research helps to fill an empirical gap within the pre-existing body of work on multimodal practices within the secondary ELA classroom. The theoretical and conceptual work by the New London Group (1996) has impacted many scholars in conceptual and empirical research (see Chapter Three). But although the groundwork has been laid and made conceptually incorporeal, empirical research has been mostly limited geographically to non-U.S. schools and institutionally outside of secondary ELA education. Multimodality must continue to be addressed beyond theory in the secondary ELA classroom in order to understand how it can and currently functions within the classroom. A multimodal approach to implementing multiliteracies allows for creative understanding and composition; an emphasis on traditional literacy does not. It allows for unpredictable possibilities, instead of anticipated quantitative results. Even more limited than the broad topic of using multiple modes to present texts and phenomena are multimodal meaning-making attempts. How do secondary students make meaning using multiple modes?

In general, the world continues to become increasingly more digital. Although the origins of the digital world lay in binary code, digital technology has become significantly more prevalent in our lives. Numbers are transferred for financial purpose through banking or the stock exchange. In other uses, written languages, static images, audio, video, and multimodal combina-

tions of these media combine to convey many messages across time and space. Some applications of the digital world, for example, are relatively mundane. Social media shares status updates, ideas, pictures, and videos in what amounts to diary entries. With more complexity, digital archives store the ongoing knowledge of humanity. It is the task of literacy educators to help students navigate the digital world in which we are all enmeshed. This includes reasonable predictions as to future digital multimodal applications.

This study sought to understand how adolescents address the task of communicating through different modes within the English Language Arts classroom. With so many conceptual pieces and studies, but with less empirical work specific within this setting, this study contributes to the body of research literature by providing a theoretical framework, backed by empirical data, for understanding a multimodal pedagogy within the secondary ELA classroom. This study also unpacked the tension between standardized, recipe approaches to instruction and culturally relevant practices that harness the unique capabilities of students.

Moving Forward

No Child Left Behind (2001) and its subsequent revision have led to accountability issues within public education. Although there are innumerable influences upon an adolescent's literacy development, this study assumes that the dominant view of teaching and learning is increasingly narrowing as a direct result of misguided local policies and legislatively-mandated practices. Furthermore, this study assumes my school is not alone in teaching to the test and following "recipe teaching" through a standardized curriculum with heavy emphases on quantitative assessments of student knowledge and meaning-making. Of course, there are places and teachers who resist standardized approaches.

While it has been addressed that I am not singular in this environment and approach, my research was conducted within my classroom. This required some considerations. I am already predisposed towards a pedagogical approach that values reading, writing, viewing, speaking, listening, and – essentially – meaning-making through multiple modes. I was also the principal researcher within this setting. Therefore, I was the teacher researcher who conducted this investigation with a major assumption: teaching students overtly in the use of multiple modes is a form of culturally responsive and meaningful instruction. While this subjectively frames my work, Alan Peshkin (1988) already observed that social science researchers are "in the subjective underbrush of our own research experience" (p. 20). Our biases are there and cannot be comported or bracketed away. They can get addressed, however. In order to effectively analyze data across the use of multiple sources and modes, the use of ATLAS.ti's software as a "textual laboratory" (Konopásek, 2008) allowed me to identify multimodal moments, transcribe them across modes, cull forth salient quotations and moments of audiovisual data, visualize, and analyze data – regardless of the modes in which they originated.

I have provided how my personal experience has informed my instruction. I have come to realize that meaning-making, through multimodal forms, are significant ways to assess and interpret student knowledge and abilities. Through my post-secondary education, this realization has further congealed. Learning, communication, and the construction of meaning are impacted by culture (Fecho, 2004, 2011; Gee, 2008), affordances and constraints across multiple modes (The New London Group, 1996; Newfield, 2014), and are in tension on our current Standards Era policies and curricula (Nichols & Berliner, 2007; Stewart, 2012). Issues of power relating to misin-

formed neoliberal notions of education and literacy (Harvey, 2007) affect the march of standardization within the American public educational industrial complex. Furthermore, my understandings stemmed from personal experience and conceptual literature.

As my review of the literature in Chapter Three shows, the empirical studies within this study's setting left room for exploration. This research presupposed to address that gap. Alt-hough this study was limited by my experience and subjectivities, by reviewing the pre-existing literature to establish a more expanded understanding in other contexts, including several in my own particular setting, I contribute a better understanding of multimodal meaning-making within the secondary public ELA classroom.

This chapter had several objectives: I started with a contextualized memory from one of my senior literature courses. I then provided a roadmap of my question's journey, including personal and academic details, developed my understanding of modes and meaning making, and finished by detailing my research problem, questions, and a brief overview for moving forward. Chapter Two provides a more formal unpacking of the theoretical framework for the study.
CHAPTER 2

THEORETICAL FRAMEWORK

Rex's multimodal transaction – #teamsatan – fixed an idea in my mind that I cannot shake. Beyond making me laugh, Rex made me stop and think. Although my emblematic hunch about the connectedness across stories, multiple modes, and contextual forms of meaning-making has been touched upon, I anchored this study with the ideas of the New London Group (1996). But I have yet to synthesize a more coherent understanding of just *how* meaning gets made in general, how the NLG impacts my approach in understanding pedagogy and research, and the role of making meaning across modes. Therefore, this chapter delineates my theoretical framework and a multimodal approach to pedagogy that fosters a direction, rather than a strict set of instructions – in other words, a way of thinking over a specific technique for application. Furthermore, it explores the significance of the transmodal moment (Newfield, 2014) and its theoretical application to the secondary English Language Arts classroom. The following paragraphs in this introduction provide a roadmap for both the theories and research that situated this study.

Starting with the work of Berger and Luckmann (1966), I go into great detail to tether meaning making to sociocultural contexts (Gee, 2008) that get constructed through language (Burr, 2003) and multiple modes. Next, I connect the New London Group's (1996) development of a multiliteracies pedagogy to this socially constructed multimodal theoretical framework. Then, I explore how Newfield's (2014) transmodal moment ties these concepts together. My intent is to unpack the socially constructed nature of reality through verbal and nonverbal semiotics, anticipating a multimodal pedagogy. I then follow those discussions with an exploration of

the theoretical underpinnings of how multimodal meaning making can occur within secondary English classrooms. The entirety of this theoretical discussion leads to a scrutiny of the New London Group's call for rethinking literacy in terms of multiple literacies, specifically multimodalities. Overall, I'm using this theory to show how the seemingly invisible transactions of the secondary English Language Arts classroom – gaze, gesture, body language, and other nonverbal responses – are rooted in the tension between the stability and instability of meaning-making and connected to the sociocultural weight connected to meaning-making.

The Social Construction of Reality

Peter Berger and Thomas Luckmann (1966) asserted that "reality is socially constructed and the sociology of knowledge must analyse [sic] the processes in which this occurs" (p. 13). George Hruby (2001) posited that rather than basing an ontological understanding of man on scientific facts or anthropological artifacts, Berger and Luckmann (1996) sought truths about the nature of knowledge which would be answered through philosophical inquiry. Instead of using historical or biological explanations, philosophy – they posited – showed that human knowledge is ultimately relative to the individual making meaning in the world. Like John Donne's (1624) assertion that "[no] man is an island, entire of itself; every man is a piece of the continent, a part of the main," the social and temporal aspects of knowledge represent a significant part of understanding how a culture develops and maintains knowledge through regular social interactions. However, the generation of knowledge does not presuppose that all humans believe the same ideas.

Not All Knowledge Created is Equal

Kenneth Bruffee (1986) used social constructionism to define reality, or the ways the world gets viewed, as generated by "communities of like-minded peers" (p. 774). I must split

hairs with Bruffee; the notion of like-minded peers implies that cultures tend to be in relative agreement. Try to define something as simple as a genre or sub-genre of music among music aficionados and there will be qualities which are agreed upon, but other characteristics may be vehemently defended. Try to figure out who the best country musician is, according to my students in a semi-rural area, and the same problems result.

Although Bruffee and Berger and Luckmann spoke broadly, Gee (2008) spoke with the specificity I need for definitional work. Gee (2008) affirmed that a given group of people will not agree on all topics, but for the purposes of developing a working theory, one can "characterize these communities as persons whose paths through life have for a given time and place fallen together" (p. 12). The looser breadth of this definition is helpful for making general assertions. However, in addressing the nature of reality, I have to address truth, relativity, and the role of human senses.

Philosophy has long been concerned with perception and its relationship to reality (Moran, 2000). In other words, how do our senses – and the experiences that result – impact our understanding of the world? Berger and Luckmann (1966) asserted that the "knowledge' of the criminal differs from the 'knowledge of the criminologist'" and, importantly, "whatever passes for 'knowledge' in a society" is indeed considered their widely held beliefs (p. 15). Similarly, Gee (2008) differentiated the terms "terrorist" and "freedom fighter" as a matter of perspective (p. 13). Another way to say this is that a text, event, or perspective can be viewed differently depending upon an individual's experience and cultural contexts. This flexibility stemming from context and individual perspective demonstrates how the tension of language gets manifested through interaction. Yet it is through repeated interactions that patterns become recognized. They do not emerge from the ether.

To solidify this point, Joseph Maxwell (2013) asserted that climate change deniers genuinely believe that global warming is not happening. People can believe that the planet isn't getting warmer until their faces turns blue, but that doesn't mean Earth isn't getting hotter year by year. The vast majority of scientists are in agreement in regard to an increase rate of climate change due to aggregate data forming a *pattern*. Connectedly, John Gardner's (2010) *Grendel*, a retelling of the old Anglo-Saxon epic, in which the eponymously named protagonist asserts that humans are "pattern makers" (p. 27). These patterns are constructions that don't simply appear; the "existence of something constructed strongly implies a willful constructor with a deliberate purpose" (Hruby, 2001, p. 48). Groups of people develop these patterns over time in specific contexts; again, knowledge is socially and contextually constructed. But what processes lead to pattern making?

The Social Construction of Knowledge through Patterns

According to Berger and Luckmann (1966), knowledge is "transmitted and maintained in social situations" (p. 3). In order to study how a group of people develops knowledge, the processes of transmission must be understood. I don't, however, agree that knowledge is transmitted – rather, knowledge gets constructed and reconstructed through transactions (Rosenblatt, 1969). Access to understanding particular groups comes through unpacking socially upheld beliefs, traditions, and ways of living. Groups develop these systems for understanding the world through patterns made and recognized socially.

Berger and Luckmann (1966) contended that the "reality of everyday life [for individuals] is shared with others" (p. 43). Recognized patterns get shared across generations and get subjectively maintained, redefined, or completely shifted. Meaning-making – about nearly any particular phenomenon from crop growth to hunting to what Nathaniel Hawthorne *really meant* –

is constantly and socially negotiated until it becomes a relatively stable, albeit impermanent, "truth" within a particular group. This truth, however, is still part of a subjectively shared construction of reality; it is not an objective fact. Herein lies the *construction* of social constructionism. Knowledge, at first, is not a given, but gets developed through social acts of communication, historical conflicts, and through the small, everyday attempts at understanding the world in which a group of people live.

The phenomena that occur daily for a particular group of people eventually get taken for granted – their realities originate "in their thoughts and actions" and are "maintained as real" as a result of thought and action (Berger & Luckmann, 1966, p. 33). Another way to say this is that piece by piece, a group of people accumulates aggregate truths in order to create and maintain predictions. Predictions are significant because they save time and effort for a particular group of people's "respective psychological" and physical "economies" (p. 75). Socially constructed knowledge functions as "tools used to simplify complex matters... so they can be better understood and dealt with" along a reasonable timeline (p. 8). Immediately perceiving the threat of a bear in the woods, rather than investigating the potential threat anew, saves time. Similarly, the proliferation of lesson plans, indicative of a teacher's pedagogy, may get reused, in whole, year after year as a way of simplifying the complex process of individualized and contextual approaches to teaching concepts and skills. Repeated encounters with anticipated results getting met become "truths" – impermanent, but relatively stable. But, of course, these truths are not necessarily objective facts.

Patterns Are Socially Upheld and Can Stabilize

It's nearly impossible to distinguish the starting point of knowledge for a particular group of people, but the construction of knowledge about any particular phenomenon *had* an origin.

Berger and Luckmann (1966) noted that the relative stability of a truth resulted from routines that "carry within them a tendency to persist" (p. 76). If this truth becomes embodied in an institution, a legitimizing force within a society, certain ways of being congeal and persist. Regard-less of morality – systemic racism, injustices, or forced inequalities stand as pernicious examples – the capacity for a "truth" to persist strengthens through institutionalization. Problematically, socially constructed truths as ugly as racism can get passed along to future generations. Sadly, future generations of a particular culture may not retain a biological memory of why a constructed truth exists, but the strength of "truth" is there nonetheless.

For the progenitors of truth in a particular culture, the "firsts to know," remember why they believe a particular truth; "[t]hey understand the world that they themselves have made" (Berger & Luckmann, 1966, p. 76). They have biological memory to serve as evidence for their assumptions. But all of this shifts when the initial generation transacts with the following generation. The objectivity of the "institutional world 'thickens' and 'hardens', not only for the children, but (by a mirror effect) for the parents as well" (p. 76). A culture develops a "history that antedates the individual's birth and is not accessible to [their] biographical recollection. It was here before [they were] born, and it will be there after [their] death" (p. 77). Any child who has heard, or a parent who has uttered, "That's just the way things are," will recognize this phenomenon. I clarify this with a more concrete example that specifically shows up in my Advanced Composition classroom when we study the American prison system.

How an individual perceives an encounter with law enforcement in the United States is entirely context specific. If police have systematically victimized a particular group of people, that group will develop aggregate beliefs about the motivations and character of law en-

forcement, in general. Therefore, repeatedly negative encounters with police will cement a particular belief among that culture. This solidifying of beliefs means that an individual from a particular group of people no longer assesses each encounter; rather, the individual would routinely avoid contact. These biases against law enforcement are a reality of life, especially in a classroom representing multiple cultures. Within my own classroom, these biases emerge in conversation, in writing, and have led to discussions, both productive and problematic. Social knowledge is shared, cumulative, and, from an evolutionary standpoint, can serve to protect a group of people, physically and psychologically. But this knowledge also comes into conflict when multiple groups of people carry completing perspectives, which is exactly what occurs within diverse English Language Arts classrooms.

Recent examples from my own classroom include student observations about tensions between members of the Black Lives Matter movement, the reactionary Blue Lives Matter, and – in my opinion – the misguided All Lives Matter movement. Without recognizing that there are legitimate threats to African American culture from police *and* threats to police from multiple groups of people, one might reach hasty conclusions about competing "truths" in regard to reality. In the world these perspectives lead to tangible political, economic, and life-threatening outcomes. It's the reduction of the complexities of the real world that lead to problems. But, how did these knowledges accrue among groups of people?

Initially, societies began forming "together [to] produce a [uniquely] human environment, with the totality of its sociocultural and psychological formations" (Berger & Luckmann, 1966, p. 69). This human environment is humanly produced and "the objectivity of the institutional world, however massive it may appear to the individual, is a humanly produced, constructed objectivity" (p. 78). Group knowledge that aims to prevent deaths is arguably morally good.

However, socially constructed knowledge can be damaging, and one culture's knowledge can certainly be at odds with another's.

Groups categorize phenomena and construct their "truths." As phenomena are observed and "tacit theories" are tested, cultures take time to develop knowledge and that knowledge is subject to negotiation (Gee, 2008, p. 4). There are "patterns... introduced" that "will be continuously modified through the exceedingly variegated and subtle interchange of subjective meanings that goes on" (Berger & Luckmann, 1966, p. 44). Again, enough encounters with police brutality could lead to the stereotyping of all police organizations as dangerous, prejudiced, and corrupt. On the other hand, if you were to serve as an officer in a high crime area, an unfair perspective of an entire group could be developed. Whose "truth" is more valid? Whose truth is more true?

Given the multiplicity of perspectives, especially considering issues of power within a society, not all socially constructed knowledge is fair. Two terms from Berger and Luckmann, recipe knowledge and typificatory schemes, are similar to Gee's (2008) cultural models. Essentially, these models are conscious and subconscious stereotypes about the way the world works. Although I do not agree at all with the following examples, I include them as representative of beliefs held true by certain groups of people: police are corrupt or always here to help; only criminals get arrested or the system itself is completely racist; welfare queens take advantage of the system or the system should always provide financial aid to the disenfranchised; corporations are wholly evil or serve as job creators. Regardless of the contextual truths of these examples, they also point out the troublesome persistence of binary thinking without addressing the significance of context. However, for certain groups of people, these are realities, regardless of their bases in objective facts. The following section will unpack these terms further.

Truths are Always in Tension: Knowledge in Conflict; Reality Simplified

Socially constructed knowledge oversimplifies the nuances and complexities of the world; when this occurs, there can be numerous sites of conflict among different groups of people. Berger and Luckmann (1966) theorized "the reality of everyday life always appears as a zone of lucidity behind which there is a background of darkness" (p. 59). Going to get one's driver's license from the Department of Motor Vehicles does not require knowledge of internal combustion engines, pending legislation about highway safety measures, or the DMV as a historical institution. If the goal is to drive a car, a member of a particular culture needs to know how to operate a motor vehicle, which correct government-issued paperwork is required, and where the DMV is located. Consequently, knowing the processes required to vote in a democratic election become specialized types of knowledge. These are examples of recipe knowledge, or "knowledge limited to pragmatic competence in routine performances" (p. 56).

Again, knowledge is subject to social processes and is historically contextual; I "relate to predecessors and successors, to those others who have preceded and will follow me in the encompassing history of my society" (Berger & Luckmann, 1966, p. 48). Whereas recipe knowledge applies to actions, there are other socially constructed assumptions about others. These accumulations of knowledge can result in what Berger and Luckmann (1966) call "typ-ifactory schemes," or types (p. 45). Gee (2008) would call these accumulations "cultural models" (p. 8). Some accumulated forms of social knowledge are helpful "truths," like learning to avoid poisonous snakes; however, some are dangerous, e.g. stereotypes, especially when they apply to making assumptions about other groups of people and individual members.

An individual does not create recipe knowledge, typifactory schemes, or cultural models, because "this process of construction cannot be accomplished by individuals on their own"

(Burr, 2003, p. 53). These are assumptions, created in aggregate, over time by groups of people. I have implied, but not clearly stated, that these terms denote a "background of darkness," a "world opaque," in which complexities of the world are ignored due to the practice of simplifications (Berger & Luckmann, 1966, p. 59). It is within murky cultural ignorance that dangerous stereotypes and assumptions about other people and their groups leads to real physical consequences, cultural misunderstandings, and – sometimes – irreparable damage.

As a secondary ELA teacher, my daily work involves more than teaching the conventions of language, speaking, and presenting. In addition, I help develop critical thinking skills so that the long-held truths of the students I teach can be brought into question; I create an environment in which students can "wobble" (Fecho, 2013, personal communication). Within the inherent tension between the long-held truths of one group and those of another, there is potential for understanding, assuming my pedagogical approach and classroom management allows for this to be productive, rather than damaging.

From my perspective as a researcher, social constructionism is just the start of how theory defined this study. Therefore, I have outlined how Berger and Luckmann (1966) portrayed the social construction of knowledge for a particular group of people and some fundamentals for understanding how an individual adopts cultural truths from society and cultures. I have also attended to how this knowledge is developed and passed on, and I have highlighted how a social truth can form an incomplete picture with the potential for cultural tension among a group itself and especially with others. Additionally, I have discussed how the individual is privy to the social truths of a culture, regardless of those "truths" ultimate validity. I have yet to address the most significant place where culture resides, where cultures face great tension, and how this entity provides the greatest potential for productive pedagogy: sign-systems, and, more importantly, language – written, spoken, visual, gestural, and beyond.

Sign Systems, Semiotics and Language: Stability and Tension

Berger and Luckmann (1966) stated that we "live in a world of signs *and* symbols every day" (emphasis in original, p. 55). These signs and symbols can be understood semiotically to serve cultural functions. Collective knowledge of a culture develops and is maintained through semiotic systems. In order to share understandings to communicate empathetically, "indices" form which afford access to an individual's "subjectivity" (Berger & Luckmann, 1966, p. 49). An individual speaks – literally or figuratively – using a variety of sign systems that were so-cially developed, but continue to be modified according to socioeconomic changes, historical events, and the inherent evolution of language. For example, a knife affords a hunter several semiotic options: a knife can kill prey or remove the raw materials for food, clothing, and shelter. As such it can symbolically represent "the hunt," "abundance," or "protection." But it can also symbolize several offensive or defensive potentials depending upon its temporal and spatial contexts.

Another way to say this is, if a member of a culture subjectively hated another, a knife planted in a wall above one's bed would be a clear indication of hate; a culture would recognize this contextually placed knife as a clear indication of subjective intent (Berger & Luckmann, 1966, p. 49). This index, a knife-in-wall-above-bed, would be easy to read. Similarly, transactions within the classroom constantly display the importance of nonverbal semiotics. I can't help but recall the biting of thumbs in the first act of *Romeo and Juliet*; students chuckle at its contemporary absurdity, but – in its day – was no laughing matter. It's clear that we live in a world

where socially constructed signs have meanings, albeit ultimately negotiable, still have the potential for relative stability. As humans evolved, so did their sign systems and semiotic repertoires.

Since knowledge is socially constructed, aggregate, and upheld by a community, the group's "common reality" allows for the reading of signs to provide empathetic access (Berger & Luckmann, 1966, p. 50). These "[signs] are clustered in a number of systems. Thus, there are systems of gesticulatory signs, of patterned bodily movements, of various sets of material artifacts, and so on" (p. 51). Herein lies a strong link between social constructionism and a multimodal view of meaning making. Although I seek to explore how multimodality plays out within the English Language Arts curriculum, I cannot ignore the strength, power, and prestige of the written and spoken word, e.g. language, within the Western world.

Vivien Burr (2003), another social constructionist, posited, "language does not reflect a pre-existing social reality, but constitutes and brings a framework to that reality for us. It is the structure of language, the system of signifiers and signifieds and their meanings as constituted in the differences between them, which carves up our conceptual space for us" (p. 52). While this is a lengthy quote, I share it because language – no matter the modes to which they are embedded – defines who we are and literally gives us the ability to share our understandings-in-progress for the world. However, these systems for understanding the world, within particular groups of people, are already structured for individuals.

In order to comprehend and share these signs and symbols, humans have the capacity of language. It is the "language used in everyday life [that] continuously provides... the necessary objectifications and posits the order within which these make sense" (Berger & Luckmann, 1966,

p. 35). Language, in addition to semiotics, is a necessary tool for interpreting the past, comprehending the present, and providing opportunities for speaking to future generations. Next, I outline how language's stability allows for communicating inner subjectivities, but due to a variety of perspectives and the social construction of meaning, language can be laden with tension and instability. Within my own practice, recognizing the flexibility of language – regardless of mode – only strengthens a learner's understanding of multiple literacies (The New London Group, 1996).

Language as stable. Defined "as a system of vocal signs, [language] is the most important sign system of human society" (Berger & Luckmann, 1966, p. 51). Language is a stable enough entity that I can conduct a study of a four-hundred-year-old text from England, *Romeo and Juliet*, with a group of ninth graders in a cosmopolitan area of Georgia. Language can represent the past, capture the present, and connect to the future. As such, the impact of language is that it "is capable of becoming the objective repository of vast accumulations of meaning and experience, which... can then preserve in time and transmit to following generations" (p. 52). However, language is a social construct that "requires social coordination; there is nothing we call language that is born within the private mind" (Gergen, 1999, p. 221). Therefore, language can have social benefits for expressing meaning and sharing particular views of reality.

Language provides access to the subjective expressions of individuals. It can unite a group by upholding shared beliefs. Language "typifies experiences, allowing me to subsume them under broad categories in terms of which they have meaning not only to myself but also to my fellowmen" (Berger & Luckmann, 1966, p. 53). Therefore, language can be used to allow communication among a culture and allow "an entire world" to "be actualized at any moment" (p. 54). Language binds groups together and can structure its individual members. The "language

used in everyday life continuously provides me with the necessary objectifications and posits the order within which these make sense" (p. 35). Language's stability is necessary for everyday social transactions. However, language isn't permanently stable.

Language in tension. I have asserted that language is relatively stable; however, it is not without meaning shifts, flexibility, and contextual variations due to dialect, geography, and history. Burr (2003) argued that "the nature of language as constantly changing and varied in its meanings that is the keystone of social constructionism" (p. 46). This idea pairs well with Bakhtinian (1981) ideas of the forces of language which standardize and those that decentralize the meanings of words. It is useful to note that individuals and groups consciously and subconsciously stabilize and destabilize language through responses to other people, places, and things. However, the stability is due to the structures of language. For a specific example, Burr uses a subjective human emotion: anger.

Because the word "anger" pre-dates an individual's entry into the world, this "suggest[s] that our experience of the world, and perhaps especially of our own internal states, is undifferentiated and intangible without the framework of language to give it structure and meaning. The way that language is structured therefore determines the way that experience and consciousness are structured" (Burr, 2003, p. 48). Our thinking, our self-concept, and our self-worth can hinge on language and its context. How we share our thoughts, our experiences, and our moods with others "are all pre-packaged by language" (p. 53). But, despite a relative stability in structure, meaning is always negotiated and contextual.

The simple point is that language, while stable enough, leaves room for interpretation due to the significance of context. Context varies, especially given the number of English-speaking cultures in the world. This becomes all the more complex when culture is considered, for, as Lisa

Delpit (1995) contended, "[one] of the most difficult tasks we face as human beings is communicating across our individual differences, a task confounded immeasurably... across social lines, racial lines, cultural lines, or lines of unequal power" (p. 66). The English Language Arts classroom, if the atmosphere has been developed as welcoming and safe, serves as an excellent location for developing these communication skills and addressing the tensions that occur. I turn next towards the work of James Paul Gee (2008) in order to connect the weight of socially constructed language and what is attached.

Language, Context, and Gee (2008): All That's Attached to Language

For this study, the social construction of meaning through language (Berger & Luckmann, 1966; Burr, 2003) anchors an integral concept: *context*. When studying multimodal meaning making, the *context* of utterances, responses, nonverbal reactions, and the *context* of the situation is paramount in regard to description and interpretation. My own analytical constructions, what others in qualitative research might call findings, hinge upon the contexts of how, why, and to what end language and semiotic systems get used during the data generation phase of this study.

Looking beyond my own classroom, Gergen (1999) posited that, due to globalization, technological advances, and increased communication between groups of people, the world "rapidly shrinks" (p. 233). As a result, groups of people "increasingly collide, so are value conflicts increasingly in evidence" (p. 233). As context shifts, the meaning that groups make shifts. Groups of people, who speak English, and those in current phases of adoption, do so with all of their previous typifactory schemes, recipe knowledge, other semiotic resources, and assumptions. As such, English cannot be separated from the people who use it, the context in which it is used, and will always be prone to tension.

According to Gee (2008), language cannot be separated from groups of people without attending to Discourses. Gee (2008) defined Discourses as "ways of behaving, interacting, valuing, thinking, believing, speaking, and often reading and writing, that are accepted as instantiations of particular identities (or 'types of people') by specific groups" (p. 3). These are "socially situated identities" and language "makes no sense outside of Discourses, and the same is true for literacy" (p. 3). Discourses are "the site of very real struggle and resistance," each Discourse "incorporates a usually taken for granted and tacit set of 'theories' about what counts as a 'normal' person and the 'right' ways to think, feel and behave" (Gee, 2008, p. 4). Within my classroom, there are a number of Discourses: Western, American, conservative, liberal, Southern, (il)/literacy, African American, teenage, popular culture, consumer, LGTBQ, and many more. Though I have labeled these individual Discourses, I realize that they are not unified completely in thought and that their socially constructed truths can vary upon context. The titles are useful for illustrating the levels of gradation within my research contexts.

Since I am concerned with the social construction of meaning, and "meaning... can be rooted in relationships that are less stable, long-term, enduring, or encompassing... in the traditional sense," I borrow "Discourse" to discuss the value-laden weight that groups of people add to language use (Gee, 2008, p. 13). For, "[t]wo people don't need to 'share a culture' to communicate," but they must have a common ground for which to negotiate meaning (p. 13). Therefore, Gee's Discourse and discourses speak to the multiplicity of perspectives and interpretive resources that students bring into the English classroom every day. Discourses allow us to have enough common ground for communication to be possible.

Gee (2008) observed that "language... always comes fully attached to 'other stuff': to social relations, cultural models, power and politics, perspectives on experience, values and attitudes, as well as things and places in the world" (p. 1). As a secondary English educator, I have seen this conception of language – and all of the "other stuff" that comes with it – holding weight with every single student and with each classroom. How students respond, verbally and nonverbally, to the curriculum of my classroom depends upon so much of what they carry, emotionally, physically, and as members of different Discourses. How they make meaning depends upon sociocultural contexts. And how teachers respond to student responses in a classroom demonstrates the nature of a culturally diverse space, again identified by Fecho and Botzakis (2008) as "one that is fraught with possibility and pitfalls" (p. 550). This notion of possibility and pitfalls is often in mind when I plan lessons and reflect upon my practice.

While much of this framework has attended to the social construction of knowledge within a generalized group of people – Discourses within the larger society – I have also attested that a member of a group cannot help but be also be a member of multiple Discourses. Access to understanding these multiple Discourses isn't entirely static; it is ever-changing, and important to the adolescent members of my secondary English Language Arts classes. Much of this chapter unpacked the significance of language and its connection to both Discourses at large and the Discourses within my classroom. Some of this discussion has touched on, but not explicitly made known: socially constructed meaning-making extends beyond verbal utterances and the written word; meaning-making is made through multiple modes used in conjunction with other modes. As Jewitt (2011) asserted, "there is no monomodal" group of people (p. 4). Combinations of modes get used in order to construct meaning. If the theories of Berger and Luckmann (1966), Burr (2003), and Gee (2008) unpack how I see meaning-making in broad terms, it is the work of

the New London Group (1996) which helps me understand how multiple literacies play a role in making meaning.

Therefore, I use the New London Group (1996) and subsequent connected researchers to frame several important ideas for my approach to teaching and researching within the secondary English Language Arts classroom. Through their work, I realize that language exists across multiple modes, traditional notions of literacy do not encapsulate the significance of what it means to read and write, and pedagogies adopted by educators play a major role in designing the social futures of socioeconomically diverse learners. I next clarify their influences, key concepts, and how these researchers impacted this study.

The NLG and a Shift in the Definition of Literacy

While Berger and Luckmann (1966) theorized that meaning-making gets constructed and reconstructed through continual social interactions, Burr (2003) asserted that this occurs primarily through written and spoken language. Gee (2008) linked socially constructed meaning-making with Discourses, the value-laden weight attached to the modes through which people transact. While these theories inform my ontological and epistemological understanding, my pedagogical and research approaches are primarily impacted by the New London Group (1996).

The New London Group's (1996) issues with their then contemporary educational and capitalist practices, ontological perspectives, and how the discussions and prior research of the authors led them to develop a "programmatic manifesto" espousing a need "to engage in a critical dialogue with the core concepts of fast capitalism, of emerging pluralistic forms of citizenship, and of different lifeworlds" in order to form a "new social contract" and "a new [global] commonwealth" (p. 73). Meeting in 1994 in New London, New Hampshire, the ten authors first

wanted to influence "the idea and scope of literacy pedagogy to account for... culturally and linguistically diverse and increasingly globalized societies" and next to "account for the burgeoning variety of text forms associated with information and multimedia technologies" (p. 61). The ten authors agreed: "the disparities in educational outcomes did not seem to be improving" (p. 63). However, sharing a background in English-speaking countries helped establish a new direction: "what students needed to learn was changing" and that this change should reflect that there "was not a singular, canonical English that could or should be taught anymore" (p. 63). Reading and writing were oversimplified terms; instead multiliteracies was coined in order to capture the burgeoning developments in literacy research and pedagogy.

The authors asserted that literacy, as a singular term, implies "language only" instead of the complex and recursive modes through which people read the word and the world (p. 64). Thus, the New London Group proposed new guidelines for how literacy educators view themselves, their students, and their approach to instruction. First, as English became a dominant language in the world, it became fragmented and there was not universal English language; as such, the ten authors "want to extend the idea and scope of literacy pedagogy to account for the context of... culturally and linguistically diverse and increasingly globalised [sic] societies" (Cope & Kalantzis, 2000, p. 9). Second the ten authors intended "to account for the multifarious cultures that interrelate and the plurality of texts [including modes of communication and meaning-making] that circulate" (p. 9).

As a result of proliferating media technologies, increased daily interactions among globalized nations, and the consequently ever-shrinking world, the New London Group (1996) argued for a new direction in education and literacy pedagogy as the new millennium loomed. The authors argued that the "fundamental purpose" of education "is to ensure that all students benefit

from learning in ways that allow them to participate fully in public, community, and economic life" (p. 60). These authors critically engaged with the political and social environment of their time, outlined how old models of education did not agree with their fundamental purpose of education, and provided a direction for literacy instruction and research. It is this direction that influenced this study's purpose: to provide additional empirical evidence through the description and interpretation of my students' multimodal modal meaning making efforts. However, the competing approaches to education that the NLG lamented continue to impact classrooms today. Their suggested pedagogical approach – outlined later in this chapter – informed this theoretical framework.

Roadblocks to Equal Multiliteracies Approaches

Due to the Standards Era educational models and neoliberal agendas, which "now occupy positions of considerable influence in education" (Harvey, 2007, p. 3), the ways of teaching and learning have been misguided under an improper understanding of "freedom." Rather than approaching the needs of the students through culturally relevant pedagogy (Ladson-Billings, 1995; Gee, 2008) or inquiry-based explorations putting student interests, learning, and knowledge at the center (Fecho, 2004), too many educational entities approach teaching and learning through what Harvey (2005) identified as the "neoliberal state" embodying the "interests of private property owners, business, multinational corporations, and financial capital" (p. 7). Lesson plans for student learning, teacher resources, and standardized assessments often come from private, profit-driven entities like Pearson and others. Deficit models pervade. Standardized approaches to lesson delivery proliferate. Many of these issues arise in my own classroom – the deficit model approach to instruction, the pervasive numbers-based approach to understanding student

abilities, and the proliferation of standardized lesson plans and assessments as the primary approaches to teaching. Therefore, the pedagogy espoused by the NLG closely aligns with my own. For more specificity, the following sections unpack what the multiliteracies classroom could look like and how it could be enacted.

How Literacies Could Look

The NLG asserted that literacy pedagogy needed to expand far beyond reading and writing in "in page-bound, official, standard forms of the national language" and break from being a "carefully restricted project" of "formalized, monolingual, monocultural, and rule-governed forms of language" (p. 61). This was an overt call for social justice as the authors saw "vast disparities in life chances" (p. 61). Similarly, the authors questioned the hazards of rapid technological change, cultures in conflict, and economic predation – e.g. "dramatic global economic change" (p. 65), "fast capitalism" (p. 66), and among the authors themselves, "differences of theoretical and political emphasis" (p. 62). With these issues in mind, how could equity for students be ensured despite numerous socio-economic issues providing obstacles to global citizenship? How could this article "form the basis for open-ended dialogue with fellow educators around the world" (p. 63)? The authors subsumed their ideas beneath the concept of design. This concept informs my designs of lessons, pedagogy, and – significant to this study – informed my approach to research.

Designers, Available Designs, and Conventions: Key Terminology

The ten authors argued that "literacy educators and students must see themselves as active participants in social change, as learners and students who can be active designers – makers – of social futures" (The New London Group, 1996, p. 64). As designers, there were six key elements "in the meaning-making process: those of Linguistic Meaning, Visual meaning, Audio

Meaning, Gestural Meaning, Spatial Meaning, and the Multimodal patterns of meaning that relate the first five modes of meaning to each other" (p. 65). Herein is the most crucial part of the pedagogical directions and emphases they espoused, in regard to this theoretical framework: as learners, reading and writing as traditionally defined, assessed, and enacted within the classroom needed to expand, shift, and change. Herein also lies a connection to Jewitt's (2011) notion that monomodal groups of people do not exist, instead people make meaning through multiple modes used in conjunction with other modes (p. 4). Design, however, helps explain how to perform this with purpose.

First, "teachers and managers" should be "seen as designers of learning processes and environments, not as bosses dictating what those in their charge should think and do" (The New London Group, 1996, p. 73). These designs should tap into existing and available structures like languages, grammar, semiotics, or orders of Discourse. Within a critique of orders of Discourse, learners engage in discussions of how advertising or politics capitalize on rhetoric through ethos, pathos, and logos. Learners could wrestle with the tensions of language as one generation adopts novel expressions and the previous generation might resist. One place within my own practice where this takes place is during synthesis writing. Students interpret a variety of texts – TED talks, articles, films, and literature – in order to interpret a variety of subjects. Following the NLG's suggestion, literacy educators become designers of curriculum reflecting a critical lens for consumers, rather than having students subjected to standardized ways of speaking, thinking, and acting.

If teachers are designers of a learning process, they will work within a particular Design convention. Within a particular "Design convention" there are "Available Designs... that take the form of discourses, styles, genres, dialects, and voices" (The New London Group, 1996, p.

75). The modes of meaning stem from elements of Linguistic, Audio, Spatial, Visual, and Gestural Design (p. 83). Here, the authors call attention to how semiotic resources are used in a particular discourse, or "configuration of knowledge and its habitual forms of expression, which represents a particular set of interests" (p. 75). These styles, genres, dialects, and voices each represent a current Available Design. However, in order to employ sound pedagogical practices addressing multiliteracies, the authors argue that students and teachers will need a metalanguage in order to approach the different modes employed throughout the entire process of meaning making.

Within my own practice, conscious design through available modes takes place through the development of presentations in Google Slides as well as incorporating images, video, audio, and text into a shared product. This design also takes place through student-maintained journals wherein topics are responded to in writing, through drawing, and manipulables – paper pieces students cut and paste as they rearrange text to make meaning. At other times, students perform gallery walks wherein political cartoons, visual art, and traditional articles serve as physical sites around the room for gathering information for synthesis writing. The topics have ranged widely; we have studied the Holocaust and Wiesel's (1956) *Night*, developed our own schools based upon a study of novel buildings and practices, and constructed solutions for veterans as we weighed the nature of sacrifice through Pulitzer Prize winning articles, news clips, and personal narratives. The NLG and Design allow for teachers to shift away from standard classroom practices.

Literacy educators, therefore, need to be familiar with and capable of helping students critically engage with Available Designs in order to help students in Designing, or "work per-

formed on [and, or] with Available Designs in the semiotic process", so that they create the Redesigned, "resources that are reproduced and transformed through Designing" (The New London Group, 1996, p. 77). Using the language of the NLG, students engage with their own versions through Designing and ultimately create the Redesigned. However, an issue arises since "semiotic activity and the texts it generates regularly [mix] genres" (p. 78). This is because Design "never simply [reproduces] Available Designs" (p. 76). This is refreshing as it places creative authority within the agencies of meaning makers, in my case, secondary students in the Language Arts classroom. This tension is illustrative of how metalanguages fluctuate.

Bearing in mind that the NLG (1996) espoused that "curriculum is a design for social futures", these social futures are obviously still malleable (italics removed, p. 73). This malleability applies to the metalanguages which describe discourses modes, genres, and Available Designs; the understanding of a concept is not learned through static "rules, but as an heuristic that accounts for the infinite variability of different forms of meaning-making in relation to the cultures, subcultures, or the layers of an individual's identity that these forms serve" (p. 88). This flexibility is important to my study's proposed impact: the NLG's article is theoretical, both through conceptual and advocatory work.

The "How" of a Pedagogy of Multiliteracies

The NLG (1996) posited four "hows" of enacted literacy pedagogy: 1) situated practice, 2) overt instruction, 3) critical framing, and 4) transformed practice (p. 88). Situated practice includes literacy education that exploits "available discourses, including those from the students" lifeworlds" (p. 88). Here, instruction defies scripted curriculum in favor of contextualized and responsive instruction. Overt instruction necessitates "explicit metalanguages, which describe and interpret the Design elements of different modes of meaning" (p. 88). Overt instruction

means a deliberate and systematic introduction and assessment of how students use modal resources. Critical framing requires literacy educators to use a lens to "[interpret] the social and cultural context of particular Designs of meaning" (p. 88). Students study the context of an Available Design from their perspectives and others in order to understand the rhetorical implications of that Design. Finally, the ultimate goal is that students "try to re-create a discourse by engaging in it for [their] own real purposes" through transformed practice (p. 87). I next provide how this might look.

For a contextualized example from my own ninth grade classroom, what would it mean to be a lawyer in *To Kill a Mockingbird*'s fictional town of Maycomb during Tom Robinson's trial? What available resources would students use to construct a defense if they were to participate in a mock trial? As the ten authors argued, the "key here is juxtaposition, integration, and living with tension" (The New London Group, 1996, p. 87). Students could become familiar with Available Designs, engage with various styles, discourses, and genres through Designing, and, ultimately, create through the Redesigned. Students whose cultures have had limited encounters within the American legal system, arguably an emblematic embodiment of the privileged dominant Discourse, could become more exposed to the modes privileged. By extension, these students could use their own multimodal analytical toolkits and cultural knowledge to explore access to new ways of making meaning and ways of countering socioeconomic injustice.

As a programmatic manifesto, the NLG's (1996) article successfully created dialogue and a direction for literacy research. They argued that the increasing communication potential could lead to more connected and globalized societies. They also argued that former conceptions of literacy needed to be updated in order to encapsulate the multimodal ways in which people make

meaning. By 2000, the authors reprinted the article as a chapter and expanded upon their work with multiliteracies and multimodality in a full-length book.

In the introduction to *Multiliteracies: Literacy Learning and the Design of Social Futures*, Cope and Kalantzis (2000) articulated that their original goal in 1994 was to "consider the future of literacy teaching; to discuss what would need to be taught in a rapidly changing near future, and how this should be taught" (p. 3). The impetus would be to declare the "shape of social change – changes in… working lives;… public lives as citizens;… and private lives as members of different community lifeworlds" (p. 7). It is this sentiment that leads me to this chapter's final discussion.

What this Theoretical Framework Provides

In order to effectively prepare students for a future in which technology, language, and ways of making meaning are in tension between relative stability and change – especially for a future in which students can be globally competitive and capable of keeping pace – the NLG provided a theoretical framework. This framework has directly impacted my pedagogical approach in that I frame lessons intentionally to include multiple modes, both to share information and in the ways in which students respond to texts. While this addresses my pedagogy, my research also is directly impacted by the combination of several theories.

From Berger & Luckmann (1966), I see how student interactions help them to socially construct meaning, contingent upon prior experiences, and interpret texts during lessons. Additionally, these researchers help frame my understanding of the widely held "truths" that students carry with them into the classroom. The variety of these truths can lead to consensus, competition, and uncertainty. Burr (2003) informs my understanding of how language is a site where meaning gets made: certain ways in which language gets used leads to stability, where meaning

is relatively clear, and instability, or sites of tension. However, Jewitt (2011) and the New London Group (1996) give me a way to see how multiple modes are used in conjunction to make meaning in a world that increasingly shrinks.

Most significant to my pedagogical and research approaches is the New London Group's manifesto (1996). The ten authors assertion that literacy educators can be designers of the social futures of their students. The NLG, for me, provide a direction and a purpose: my pedagogy should reflect one in which students are provided learning opportunities to become multiliterate with less socioeconomic inequalities. For this study, however, they provide a way for understanding how meaning-making occurs across different groups of people using different combinations of modes. With this theoretical framework established, Chapter 3 explores the research spawned by the NLG (1996) and Cope and Kalantzis's (2000) subsequent book chapter.

CHAPTER 3

LITERATURE REVIEW

The story of my question, Chapter One, and my theoretical framework, Chapter Two, shared how my personal investment in literacies has impacted my understanding of how meaning gets made through various modes and semiotic systems. Enough reflection on my early literacy practices, professional experience, and continued formal education – especially through writing workshops, like the Red Clay Writing Project (2009), and graduate school – have led me to value a certain approach to teaching that is justified and situated across several theories. But the aggregate combination of my experiences as a consumer and creator point towards the NLG's (1996) article as an anchor for my research. Why, though?

The NLG, as a collective of ten scholars, recognized the important of literacy, technology, sociocultural contexts, and that social futures can be *designed* – not through nefarious schemes, but through literacy lesson planning – in order to create a more equitable democracy across socioeconomic and class lines. Herein lay theories connecting social justice, multiple modes, and ways of increasing socioeconomic equities through teaching literacy skills that are simultaneously multimodal and critical. The New London Group's (1996) publication and subsequent chapter revision (Cope & Kalanztis, 2000) have influenced a breadth of scholars. Prior to the impact of the NLG, however, American pedagogy did involve multiple modes. In other words, multimodal pedagogies in the US had already been in use, but unidentified as such. American Literacy education started with the founding of the nation. First, I use Nila Banton Smith's (2002) work to outline the major historic contributions towards a multimodal literacy pedagogy – without it originally being labeled as such. I use Smith in order to show that American literacy education has, at times, shifted foci from multimodal approaches towards more print-centric practices. After an analysis of Smith's work, I move towards many studies to demonstrate the breadth of the NLG's impact. This is done to represent two primary movements relevant to this study: first, there has been a widespread advocatory and empirical impact on the direction of research by the NLG and its authors, and, second, that the group's impact within the secondary English Language Arts classroom leaves space for more empirical studies. Finally, this chapter anchors the study in several key aspects that I identified from the direction of research the NLG inspired.

A Brief History of US Literacy Pedagogy and Multimodalities through Smith (2002)

Prior to 1607, the dominant form of literacy instruction came through hornbooks. These tools were constructed using "wood, iron, pewter, ivory, silver, and even gingerbread" (Smith, 2002, p. 5). Hornbooks have a rich history spanning the Middle Ages and containing the "minimum essentials' deemed necessary for one's spiritual existence" (p. 7). Thus, Biblical literacy was valued. Using hornbooks has various modal affordances: tactile, visual (when they included illustrations), writing, and even gustatory – Smith shares that gingerbread was used as a material. However, due to cost and differing cultural attitudes towards literacy, constraints to knowledge came through inequitable access to hornbooks.

The dominant view of literacy during the colonial period held that it was a path to Godliness. Hornbooks, primers, ABCs, and Psalters "were commonly used" (Smith, 2002, p. 13) until the "middle of the 18th century" in an effort to allow Protestants better access to the word of God

(p. 15). Most significant was the addition of primers, more readily available with the proliferation of the printing press, within the colonial period. Primers used "easy syllables for children" as a starting point but included visuals. Thus, a modal connection between print and image was established early on in American education to facilitate making meaning during literacy instruction.

Literacy educational content shifted towards a pairing of print with visuals. The *Christmas School Primer* "had an illustration for every story" (Smith, 2002, p. 56). The use of series extends use beyond one book to several. The implementation of series in literacy education shows threads of meaning making across texts, rather than through one primary text. The inclusion of series in education was a result of an increase in print technology. The types of printed books increased dramatically: readers, primers, sets, spellers all served unique functions with various level of textual complexity.

Pedagogical methods during this period included a substantial emphasis on speech as the mode and measurement of reading ability. The goal of literacy instruction was to either become a good reader or an articulate oral reader. Thus, an emphasis on orality as the dominant modal began. However, another major pedagogical shift was to occur, centering on Horace Mann's observations in Prussia.

Horace Mann and Multimodality

Horace Mann was an American politician and education reformer. Inspired by the Prussian school, Mann employed a multimodal pedagogy – albeit unnamed such at the time – as an available instructional tool. The following episode from Mann's observations in Prussia represents this well:

The teacher first drew a house upon the blackboard; and here the value of the art of drawing... became manifest. By the side of the drawing and under it, he wrote the word house in the German script hand, and printed it in the German letter. With a long pointing rod, – the end being painted white to make it more visible, – he ran over the form of the letters, – the children, with their slates before them and their pencils in their hands, looking at the pointing rod and tracing the forms of the letters in the air. In all our good schools, children are first taught to imitate the forms of letters on the slate before they write them on paper; here they were first imitated on the air, then on slates, and subsequently, in older classes on paper. (Smith, 2002, p. 72).

Beyond the physical modes, speech was used as well: "the letter s was first sounded by itself, then added to the others, and then the whole word was spoken" (p. 72). Thus, visual, kinesthetic, print-based, and speech as modes were combined first in the Prussian schools and then emulated by Horace Mann. The formal observation and application of Horace Mann – essentially his research-based approach – led to a new paradigm in literacy education: empirical observations *could* inform instruction.

Research, The Space Race, and the Global Scientific Community

Science and research became foundational frameworks for driving literacy policy during the next period identified by Nila Banton Smith (2002). The dawning of literacy instruction in America was marked by the supremacy of "oral reading... over [other] classroom methods" (Smith, 2002, p. 149). However, "between 1918 and 1925" there was an "almost exclusive emphasis on silent reading procedures" (p. 150). The "laboratory studies of the preceding period had revealed differences between silent and oral reading" (p. 151). Thus, a modal paradigm shift

marked the transition from oral towards silent reading. Typical with a change in policy and underpinning philosophy, the professional pedagogical books of the time became concerned with silent reading, speed reading, and "classroom procedures" to facilitate thinking about reading, over orality (p. 156). These shifts represented different priorities and values of the dominant Discourse.

Surprisingly, nuclear technology had a direct impact upon the classroom; the implications of Dr. Enrico Fermi's "first successful nuclear energy machine" permeated throughout all aspects of America (p. 247). Smith (2002) observed that the "atomic age and reading immediately became interactive" (p. 247). The events of World War II would lead to many problems: "labor disputes; shortages in food, clothing and shelter; and the Russian aggression in building up communist governments in other countries, and in extending its party activities in the United States" (p. 248). It was during the "war years" that America faced "reduction in teaching personnel" and "the employment of poorly trained or untrained substitute teachers meant that teaching was not always of high quality" (p. 248). University research was not untouched; during this period there "was a reduction in output of research and instructional materials" (p. 248). Thus, the creation and implementation of a new technology, nuclear power, led to a direct reduction of literacy research. The momentum of literacy research and pedagogy was almost completely encompassed by the military and social events of 1935 – 1950. After this period, the Space Race prompted another shift in literacy.

Despite the United States' possession of "the most deadly weapon of warfare," Russia's launch of Sputnik in 1957 meant that the "[supremacy] of the United States was now challenged by the technological achievements of another nation" (p. 290). As such, the prides and economies of nations were at stake. There were palpable "pressures... to produce more and more and

to do it faster and faster" (p. 291). These pressures were made manifest through increased government support of reading, literacy research, and social programs to end the "war on poverty" (p. 292). During this time, other technologies impacted traditional forms of literacy. The radio, comics, and movies "were becoming increasingly popular" and led to "worry on the part of school people and parents" (p. 252). After the end of the Cold War, there was a shift in the role of schooling; for in the "Old World" schooling "meant imposing national standards over dialect differences", but in "the New World, it meant assimilating immigrants and indigenous peoples to the standardised 'proper' language of the coloniser [sic]" (Cope & Kalantzis, 2000, p. 14). Herein marks a major shift from technology and culture as localized to globalized; homogenizing forces limited literacy instruction to become more standardized. This also links to part of the story of my research questions: a narrow view of what constitutes literacy. Capitalism, politics, and a sense of nationalism continue to impact English Language Arts pedagogy, just as the NLG identified. However, how did literacy pedagogy in the United States start shifting towards a formally-labeled multimodal approach?

From the Past to the Present

I used Smith's (2002) highlights throughout literacy instruction in American history to demonstrate the shifts towards and away from multimodal pedagogies. In doing so, I provided a preliminary conception of how multimodality pedagogy has been regularly and systematically employed to help generations of students make meaning, despite not being formally identified as such. Shipka (2013) asserted that there is a "tendency to equate 'multimodal' or 'multimodality' with digitized, screen-mediated texts" but this conception "may severely limit the kinds of texts and communicative strategies or processes students explore in… courses" (p. 74). However, I use "multimodal" to refer to a pedagogy focused on the premise that humans making meaning

using multiple modes. Connecting to this study's theoretical framework, there is additional socioeconomic weight attached to multimodal ways in which students socially construct meaning. In research, however, the term "multimodality" was never previously employed in regard to literacy; it has, however, gained prominence through what I identify as a major and historic publication for understanding the implication of multimodality, the New London Group's (1996) "A Pedagogy of Multiliteracies: Designing Social Futures."

According to Thomson Reuter's *Web of Science* (2017), the New London Group's article has been cited 688 times, evidence of its substantial reach since its initial publication. This doesn't include how many times the revised chapter version of the article (2000) was used, nor does it include the individual citations of the scholars themselves. Personally, however, the article has been a thread through the most impactful scholars I study. Although it claims not to be comprehensive and exhaustive, the New London Group's article offers theories linking socially constructed knowledge, technology, media literacies, and culturally adopted semiotic resources.

As a result of proliferating media technologies, increased daily interactions among globalized nations, and the consequently ever-shrinking world, the New London Group (1996) argued for a new direction in education and literacy pedagogy as the new millennium loomed. The authors asserted that the "fundamental purpose" of education "is to ensure that all students benefit from learning in ways that allow them to participate fully in public, community, and economic life" (p. 60). Furthermore, this goal could be realized through a critical multiliteracies approach.

Similarly, these authors critically engaged with the political and social environment of their time, outlined how old models of education did not agree with their fundamental purpose of

education, and provided a direction for literacy instruction and research. Although their collective contribution was initially theoretical, it had a profound impact upon literacy research, both advocatory and empirical, across multiple fields.

Research on New Literacies and Multimodalities

When I first read the New London Group's (1996) publication – over ten years after its initial publication – the call to understand the multiplicity of literacies and for critical pedagogy was impactful. As I paid more attention to the citation practices of the researchers and theorists whose work spoke most to me, I found either the publication itself or several of the authors themselves cited. In exploring the literature published since 1996, the article's impact has been, indeed, widespread. The following works have direct citations of the article, the book chapter, or the authors themselves. Since the work appeals to many fields, the following review of the literature has expansive breadth. Overall, the articles often reflect a palpable excitement related to a call for expanded literacy theories, the New London Group's multiliteracies, or exploring the potentials for student learning adopting this conception of reading and writing in the 21st century.

The archive of studies which eventually constituted this literature review was created from searches conducted between August 2013 and May 2017. Using my university library's multisearch feature, I created several inquiries. Initially, I searched for peer-reviewed articles from 1996 onward which included the New London Group (1996) or Cope and Kalantzis (2000) as a citation. This led to a large number of articles. As I narrowed down the research, I used several search terms *multimodal*, multiliterac*, english language arts, language arts, secondary,* and *high school*. My initial searches led to little in the area of secondary English Language Arts. Eventually, to find more within this study's setting, I implemented the same search terms using Google Scholar. From the constructed archive, I selected studies based upon their breadth – to show the NLG's impact across fields, geographic locations, and levels of formal education – and, finally, for their immediate relevance to the secondary English Language Arts classroom. The research varies in quality – some included specific methods, settings, and participants; some neglected to share information about methods, settings, and participants – but the following sections serve two purposes and provides direction for the rest of the chapter. First, I share selections from the NLG's broad impact upon the body of research. Next, I share the research specifically conducted within the secondary ELA classroom.

Outside the Secondary ELA Classroom, Inside Literacy Studies: Widespread Impact

Within the first few years since its publication, many scholars noticed that a sea change on the horizon in terms of how to address the skill sets and multiplicities of literacies that students would need to succeed in a brave new world. These scholars noticed a rapid shift in communication affordances and each contributed to the theoretical advocacies that people make meaning through multiple modes, in social contexts, and with differing capacities. The following authors, spanning diverse fields of knowledge but connected through literacy related work, each either cited the New London Group's initial article (1996), subsequent book chapter (2000), or authors related to the project. In publishing their work, the following scholars argued for a pedagogical shift through advocatory pieces or specific empirical studies in settings outside of the secondary English Language arts classroom.

I found that surveys of published research came first and continued to the present. Richard Kelder (1996) provided a survey of theories of literacy instruction from 1974 to 1996 and included the piece. When reviewing work from Brian Street (1995) on social literacies, Joanne Larson (1996) compared his work to that of the New London Group. Luke and Elkins (1998)
echoed the call of the NLG in order to editorialize what literacy might look like in the 21st century. Douglas Kellner (1998) noted that the piece played a role for expanding educational theory during "one of the most dramatic technological revolutions in history, changing everything from the ways that we work, to the ways that we communicate with each other, to how we spend our leisure time" (p. 1). Although this was published a decade before the Internet social networking boom in the mid 2000s, the words are prophetic, nonetheless.

Kellner (1998) observed that "computer culture" was "proliferating" and literacy educators not only have to "begin teaching computer literacy from an early age" but "computer literacy... itself needs to be theorized" (p. 12). In the UK, Matthewman, Blight, and Davies (2004) focused on one case study to both unpack the tensions that multimodality caused in an English classroom and to advocate for the future use of a "pedagogy which embraces visual and multimodal representation" (p. 153). Leu and Forzani (2012) performed a survey of the research in order to share both the evolution of New Literacies and where they might head in a Wed 2.0, 3.0, 4.0 and beyond – essentially this paper was snapshot of current practices and an anticipatory text of literacy practices in the future. I noticed a major conclusion throughout surveys of literature after 1996: theorists and scholars worked to relay and strengthen the theoretical call for an expansion of literacy pedagogy to better anticipate future literacy skills needed to succeed. Clearly, the call for designing social futures through multiple literacies had been heard by scholars.

Post-Secondary Literacy Research tied to the New London Group

While these surveys contributed to the body of knowledge about new literacies through cataloging, they primarily focus on post-secondary settings. Similar to Kelder's (1996) work, a grant from the Conference on College Composition and Communication allowed Anderson et al (2006) to explore the impact of multimodality on compositions "that take advantage of a range of

rhetorical resources" within the post-secondary environment (p. 59). Anderson et al provided a survey of empirical studies that centered on multimodality within post-secondary composition settings. Anderson et al (2006) surveyed post-secondary composition educators at seventy-two universities in the United States to find that the multimodal work being completed was prompted by individuals, rather than departments, as a pedagogical goal for implementation had not been initiated. However, ninety-three percent of respondents "[indicated] that they had students analyze and compose multimodal texts" (p. 75). According to these results, it seemed that university writing curriculum had been impacted by the call for multimodal pedagogy.

Another study from Bazalgette and Buckingham (2013) surveyed UK research from early childhood education settings with findings that there was still a limited approach towards implementing multimodal pedagogies within classrooms. Beyond surveys of research, more specific studies illustrate the impact of multimodality and multiliteracies upon post-secondary literacy pedagogy. As a result of these studies, I identify a key facet across the literature: survey work – featuring the NLG, subsequent chapter, and key authors – shared empirical and advocatory papers from 1996 to the present.

Beyond studies that surveyed hitherto published research, document analysis was heavily used in studies of multimodal, multiliteracy, or new literacy approaches to university research. Anstey (2002) reviewed postmodern picture books and their impact in early literacy education programs in order to share the complexities of using a new literacies approach to teach reading. Jan Blommaert (2004) analyzed "a set of handwritten documents" from "a Burundian asylum seeker in Belgium" in order to unpack globalization's impact upon multiliteracies, a key facet of the NLG's theory (p. 643). These documents were print-based, visual, and relied upon multimodal aspects like image and layout.

Using the language of the NLG was a constant thread throughout the literature. Love (2004) studied how American pre-service teachers make meaning through multimodality through during direct instruction using the NLG's metalanguage analyzing documents produced by the pre-service teachers themselves. In line with definitional work through publication, Kahn and Kellner (2005) outlined the impact of No Child Left Behind (2001) and the US National Educational Technology Plan (2004) in order to share a new definition for "technoliteracy" based upon the work of the NLG. Ying Liu (2010) performed a survey of Community Capacity Building (CCB) research in order to unpack how the field could benefit from a multiliteracies framework; more definitional work for the NLG – albeit in a more specialized field – was completed in this paper. Similarly, Arlene Archer (2006) published a paper arguing for a shift from the term "academic literacies" studies towards a multimodal approach based upon her doctorate work with engineering students in a South African post-secondary classroom. Archer continued to study new literacies within higher education in South African settings: first (2010), within a writing center and next (2015) across case studies from South African education. Archer's (2015) publication used the NLG's social justice perspective and found growing inequalities across different formal education settings. However, this wasn't the only author who used the NLG's suggestion to view education with a critical lens.

Continuing to focus on university-related settings, the impact of the NLG and connected authors has taken root as evident through the scholarly work critiquing current literacy practices at the university level. In Singapore, Koh (2002) used the NLG to provide a framework for critical literacy in the 21st century in an Op-Ed piece to promote what he called a "thinking culture" (p. 256). Brumberger (2005) surveyed BizCom listserv users to find that visual rhetoric, within the curricula of business communication education, was lacking in undergraduate courses; only

20% or less of teaching was "dedicated to visual communication" (p. 318). Jones (2006) shared the detrimental impact of neoliberalism on English education in England; he critiqued the conservative-led march towards standardization, echoing the NLG's distaste for the top-down imposition by the language of the "coloniser [sic]" (The New London Group, 1996). Hattam and Zipin (2009) published an introduction to a symposium on pedagogical justice using the NLG as a groundwork text to help frame an approach that could "meet challenges of significant demographic and social change, including poverty, un(der)employment, and increased levels of cultural diversity and itinerancy" (p. 297). Hilary Janks (2012) published a piece asserting three key points: critical literacy is important, despite "muttering about its being passé; consuming and composing visual texts play a primary role in being critically literate; and provides activities necessary in classrooms "around the world" (p. 150).

Multimodal work within the university setting continued. Ball (2006) advocated for rubric use among assessing multimodal compositions in undergraduate writing courses. Nelson (2006) studied the student-espoused impact of composing multimodal texts. Hamston (2006) analyzed the "assessment tasks" of three Bachelor of Education students at the University of Melbourne in order to interpret their "critical engagement with a multimodal text at the Australian Centre for the Moving Image" (pp. 38-39). Examining academic literacies overall, Lillis and Scott (2007) analyzed the issues among students and provided advice for educators. Bearne (2007) studied the perception of writing – including manual and digital – by primary students in and out of the UK classroom in order to advocate for a new literacies approach. Bearne found that the majority of students didn't implicitly include digital composition within the range of what constitutes writing as an act. In *A New Literacies Sampler*, edited by Knobel and Lankshear (2007), chapters continued the work by the NLG. The chapters defined new literacies in general

(Lankshear & Knobel, 2007), speculated on the impact of technology in future classrooms (Leander, 2007), and predict how literacies would function out-of-school, but online (Davies & Merchant, 2007; Knobel & Lankshear, 2007). Terminology development, refinement, and application both played a major role in the book and seemed to anticipate future work in the field.

Bezemer and Kress (2008) unpacked key terminology from a multimodal pedagogy – *signs, modes, framing, and design* – to provide a social semiotic account of learning as presented in math and science textbooks. The same authors (2009) explored a similar analysis of history textbooks to be used by preservice educators. Baynham and Prinsloo (2009) edited a volume of chapters that either provide theoretical advocacy or share studies – across multiple sites of formal education – to advocate for both new literacies and multimodal approaches to university composition studies. Cloonan (2011) also, but more specifically, advocated on using the NLG's meta-language for teachers of pre-service educators.

Similar work continued across a gamut of university-related studies. David Andrew (2011) completed his experimental doctoral dissertation on how the artist's sensibilities impacts multimodal pedagogy across multiple levels of South African education. For university writing workshops, Bogard and McMakin (2012) advocated for implementing traditional and new literacies. Studying how university researchers created multimodal transcriptions of audiovisual data in the UK, Bezemer and Mavers (2011) concluded that "there are significant representational differences between multimodal transcriptions" and traditional audio transcriptions (p. 1). Brewer, Selfe, and Yergeau (2014) published a short piece on how the Computers and Composition Digital Press (CCDP), a project within the Composition Studies field, attempted to "establish a culture of access" to digital writing tools for multiliteracy pedagogies through engagement with various educational entities and the bestowal of awards. Although they concluded that the culture

had not been established, "a culture shift" was "underway" (p. 153). Also related to Composition Studies was a piece published by Hill and Ericsson (2014). In it, the two authors use survey research to speculate what "the literacies the class of 2020" will have "brought into the classroom at the outset of their educational careers" (p. 143). Within the piece, the authors attempted to peer into the future of literacy education within the field of post-secondary composition pedagogy.

Additional studies influenced by the NLG framework involved English language learners in regard to multimodality. Nelson (2006) too studied multimodal composition with five ELL freshman students: "two Hmong students, one Taiwanese native speaker of Mandarin, one Korean student and one native speaker of Cantonese" using Kress's (2003) terminology: synesthesia, transformation, and transduction (p. 59). Ava Becker (2014), framing her study around the "shifting nature" of emotionally difficult knowledge for learners, used semi-structured interview data from a refugee participant with Chilean heritage. Becker proposed that the "intersection" of funds of knowledge, multiliteracies, and multimodality play a role in making meaning of one's painful past. Chan and Chia (2014) advocated for reading visual texts in ESL and EFL courses using a multimodal framework.

Clearly, the call for multimodal pedagogy – and the theoretical framework espoused by the NLG – was answered at the university level. Because the primary readers of the NLG's publication were associated with collegiate work, it spread through college composition courses and was applied through research and through writing practices assigned to post-secondary students. Yet, how did the NLG fare in other settings within the literacy field?

Within Primary, Middle, and Secondary Literacy Fields and Outside of School

Beyond university-related work, studies have been completed for primary, middle, and secondary school subjects. Jewitt et al (2001) studied the multimodal environment of a science classroom. Presented at a conference, Healy and Dooley (2002) studied the pedagogy practices of a digital reading pedagogy in two middle class suburban schools in Brisbane, Australia. A primary goal was to provide empirical data to inform "professional development in the field" (p. 1). Kist (2002) examined a secondary Western Civilization class. Chandler-Olcott and Mahar (2003) explored fan-fiction – a practice of creating texts based in pre-existing literary canons – interviewing urban middle school students in upstate New York from a new literacies framework.

In Finland, Leino, Linnakylä, and Malin (2004) used survey data collected from the Programme for International Student Assessment (PISA, 2000) in order to provide the multiliteracy profiles. Gleaning data from 4,864 fifteen-year-olds, the authors framed their study using the work of the NLG in order to provide statistical data about their reading habits across internet activities, books, and other print texts. In the UK, Jewitt (2005) used several settings – English, science, and video games at home – in order to unpack what multimodal reading and writing could look like in the twenty-first century. Also in the UK, Carrington (2005) applied new literacy studies to the author's interview on Australian radio and the language used by young people, specifically SMS texting, as it moved into the classroom. Tierney, Bond, and Bressler (2006) investigated how secondary students learn about ancient Western cultures through multimodal means in social studies classrooms. In the media center setting, Goodin (2006) used the NLG's framework to unpack the importance of multiliteracies as they pertain to the school library as a literacy resource.

Published works related to primary, middle, and secondary schools continued to use multimodal, new literacy, or a multiliteracies frameworks. Callow (2006) studied the "persuasive role of images in political advertising" in a primary school in Sydney, Australia (p. 7). Anna Fterniati (2010) studied Greek elementary school textbooks and their multimodal affordances in order to specifically advocate for a pedagogical approach like the NLG's within Greek Language Arts curriculum. In Greece, Papadopoulou (2009) commented upon the contemporaneous early childhood education in terms of literacy and multiliteracies.

In the UK, Jewitt, Bezemer, Jones, and Kress (2009) used data from two case studies from unspecified English classrooms – one performed in 2000 and another in 2006 – in order to use a multimodal framework to unpack how English had changed as a result of the proliferation of digital technologies and shifts in state-mandated educational policies. The authors performed a "comparative analysis from a (micro) multimodal perspective" to conclude that the interactions of teachers and students "have changed in some significant ways (and remained the same in equally significant ways" (p. 16). Also classroom based, McDermott (2010) advocated, based upon his experience as a high school teacher, for using multimodal writing tasks in the science classroom. In a similar setting, Alvermann and Wilson (2011) developed comprehension strategies for multimodal texts in the secondary science classroom using a middle school teacher, Ms. Thompson's, instructional practices. Of particular importance was text-image relationship within science textbooks and how Ms. Thompson took particular advantages of the affordances that text-image pairing has on meaning-making.

This emphasis on using visual texts was also found in the literature. Hassett and Curwood (2009) drew data from three teachers in an ongoing elementary school research project in order to unpack the "instructional dynamics" of using visual texts – specifically picture books and

SMART board presentations – as "springboards" for student writing (p. 274). The study not only emphasized the approach of using NLG's terminology – design, affordances, and more – it further strengthened the use of visuals with both teacher modeled and student-inspired meaningmaking through reading and composition. Visually related through the use of graphic novels were three studies in particular. Chun (2009) advocated using graphic novels for English-Language Learners, Danzak (2011) suggested using a multiliteracies approach with ELL teens for sharing immigration experiences as graphic stories, and King (2012) provided a survey of Canadian history through graphic novels specifically as a reference for teacher candidates.

Within the same field as King (2012), Brown (2013) argued for the implementation of multimodal intertextuality within US secondary social studies classrooms. Dressler (2014) published a piece using student-generated images from a study that researched six to eight-year-olds enrolled in a German bilingual program in Canada. Hui (2011) studied a class of twenty students, in a half-day kindergarten class, who used drawing as a form of pre-writing. Using a multimodal perspective, Hui supported a multimodal "view of literacy" and unpacked how "social aspects and the artistic element" impacted a successful program (p. 3).

Dressler (2014) specifically advocated for using a multimodal pedagogy involving the "rich linguistic repertoires" as part of a curriculum to celebrate diversity in building linguistic identities (p. 50). In a book chapter, Burset, Bosch, and Pujolà (2016) used multimodal discourse analysis in order to critique the digital learning material for Spanish as a first language and English as a Foreign Language (EFL) in primary and secondary educational settings in Spain. While the preceding pieces are worth mentioning, due to their connection to this study, they serve another purpose. They begin to narrow the breadth of NLG's impact towards the secondary class-room. Following this, I shift towards more specific publications about the secondary English

Language Arts classroom which focus on multiliteracies, New Literacies, and multimodality in two forms: through advocacy and empirical studies.

Impact within the Secondary ELA Classroom Setting

The previous scholars produced their work through diverse contexts, though the research sites were primarily at universities in the US, the UK, and Australia. The pieces were included in this chapter in order to demonstrate the breadth that the New London Group and its authors had upon the body of knowledge in order to frame this study. Although the impact within the secondary English Language Arts classroom has been more limited, the following pieces represent related peer-reviewed work which falls into two categories. Either the published works advocated for a multimodal approach in the secondary English Language Arts classroom or featured studies in this environment specifically.

Advocacy. As I read through the literature, a similar trend to the broader impact of the ELA was identified: definitional and survey work tends to help trace the publications in the field. Kist (2004) used the new literacies "movement" in order to imagine the impact of technology within future English Language Arts classrooms. At the time, Kist (2004) asserted, audiovisual curricula were used but not fully realized (p. 3). Anecdotal examples with specific locales were cited, but the work itself served to promote "active learning" through "real-world skills" in order to develop a "new definition of literacy" rooted in work of the NLG (pp. 2 - 7). Authors Borsheim, Merritt, and Reed (2008) each shared advocatory surveys of research and theory for multiliteracies within the ELA classroom with foci on its impact in the traditional curriculum, outside the school, and for preservice teachers. From these surveys, the authors shared their three similar but distinct views on how to impact future curricula, student reading habits, and teacher education programs. Albers and Harste (2009) also provided a brief survey of how multimodality, new

literacies, and their connections to the arts – in general – first arose, the scholars involved, and how the terms had impacted the proliferation of each term across research and its use in the ELA classroom. Beyond survey work, some authors took the NLG's call for a critique of current schooling practices and followed in fashion.

Building upon over six years of critical research in urban schools in northern California, Jocson (2009) used data from her experience with June Jordan's "Poetry for the People," a project aimed towards integrating poetry in English Language Arts classrooms, to strengthen the call for social justice pedagogy. This call included the NLG's multiliteracies approach that provides "skills linked to cultural and power structures in society" (p. 271). William Brozo (2010) provided a critical commentary on how the Response to Intervention (RTI) process in secondary schools, specifically in addressing reading deficits, failed to provide adequate literacy support. Brozo's (2010) work – citing the needs of learners through data generated by the National Assessment of Educational Progress, College Board's ACT test, the National Education Summit on High Schools, and the national (US) student dropout rate – specifically details how a multimodal approach has been neglected. A comprehensive program of contemporary research-based remediation, Brozo asserted, is needed in order to improve literacy skills. Also critical in nature, Hinchman and Moore (2013) provided a commentary on the use and misuse of "close reading," a key focus of the Common Core Standards" (p. 441) referencing the NLG as a guideline for ensuring that strategy instruction (p. 447) remains a standard for evaluating an assignment or strategy's purpose.

Similarly, Leslie Burns (2012) published a commentary on the need for political involvement by literacy advisory groups in order to implement "New Literacy Studies scholarship" and pedagogy with the shift towards College and Career Readiness Standards in a post No Child Left

Behind environment (p. 93). Dalton (2012) also advocated for a multimodal approach to the secondary English Language Arts classroom but specified the Common Core State Standards for not including "a standard for technology and media" (p. 333). Contradicting Dalton (2012), Manderino and Wickens (2014) specifically noted the inclusion of multimodal texts for communicating meaning through the students need to "*Integrate visual information (e.g. In charts, graphs, photographs, videos, or maps) with other information in print and digital texts*

(CCS.ELA-Literacy.RH.6-8.7) [emphasis in original]" (p. 34). However, the authors cautioned to not using multimodal texts as "'hooks' for motivating student reading" but that a multimodal pedagogy with "teacher instruction for comprehension and production of multimodal texts is critical for students to fully engage in the disciplines" (p. 34). Despite the nature of these studies, the critical approach wasn't the only route taken for advocacy work in secondary ELA settings.

Taking a less critical approach, Hodgson (2011) reported on the International Federation for the Teaching of English (IFTE) to draw out the conference's suggestions for theory, research, and policy. Still relevantly cited was the NLG's call for a multiliteracies approach through implementing digital writing through lesson design as globalization increases (p. 261). Campbell and Parr (2013) applied a new literacies pedagogy approach to advocate pathways for literacy educators to navigate the curriculum and standards. The authors provided specific classroom examples within a new literacies framework. Stergios Botzakis (2013) similarly contributed by outlining specific visual and digital texts for secondary ELA teacher use. Botzakis's work connects to the intentional design aspect that the NLG espoused. Olthouse (2013) outlined the benefits that Gifted Education, in English Language Arts, could benefit from a multiliteracies approach. Olthouse specifically applies the terminology the NLG applied to understanding literacies.

For secondary teachers of English Language Arts, Gloria Jacobs (2013a) created additional tools for assessing multiliteracies through a rubric for designing multimodal assessments. Specifically, Jacob's (2013a) table draws upon the advocatory research by "Cope, Kalantzis, and others" in order to suggest that "the core of a multiliteracies assessment is the core of any meaningful assessment" (p. 626). Jacobs published two additional pieces with similar ties. First, she sought to clarify multimodal terms (2013b) and, then, she reimagined multiliteracies (2013c) in order to unpack multimodal potential within ELA classrooms. Jacobs (2013c) cautions that a "multiliteracies framework may not work within a formal learning environment, despite a teacher's best intentions" unless educators consider "increasing recognition of diverse voices and perspectives" in order to "create room for play and the unexpected" as they "consider the meaning of design" (p. 272). The call for unknown outcomes connects well with the inquiry approach used in this study. Beyond the unknown and beyond the work advocating for a pedagogical approach related to the NLG, empirical work has been conducted.

Empirical. Jill Bourne and Carey Jewitt (2003) conducted a case study that examined the interpretation of a literary text in a multi-ethic urban secondary school by 14 to 15-year-olds. Focusing on generated audiovisual data, interviews with the teacher, and student interviews, the paper shared salient moments from their transcripts including speech, gaze, gesture, and posture to conclude how a "multimodal approach opens paths to a newly intense focus on meaning, learning, language, and literacy" (p. 71).

In 2008, Ajayi published a study exploring how thirty-three secondary language learners and their teacher constructed word meanings through "multimodal representation" in a variety of activities including text, photographs, and a mock political campaign (p. 206). Later, Ajayi (2013) explored the impact of new literacies on sixty-two ELA teachers through attitudinal

scales and a written response. Alexander (2008) unpacked the challenges facing ELA students in regard to the increased use of the internet and how a multiliteracies perspective influences how students view themselves towards the "information architecture, intellectual property, software development, gaming, and learning" (p. 150). Within the data gathered were early student uses of blogs, Web 2.0 tools – the label applied to the interactive modes of online communication, and posts on developing forums.

Benson (2008) studied an urban junior and senior language arts course, gathered data across a year, to share how an ELA teacher, Mr. Brooks, expanded the definition of text to include a multimodal and new literacies perspective, specifically situated within the language of the New London Group (1996). The data sources were classroom observations, field notes, analytical memos, and interviews using "seven focal students" (p. 644). Using grounded theory (Strauss & Corbin, 1998) for analysis, Benson concluded that there are inherent contradictions in students' minds from the use of teacher-generated multimodal assignments. Without being made metacognitively aware of the "underlying" purpose for a multimodal activity, students lacked an understanding of multimodal impact and the academic purpose of integrating a multimodal pedagogy (p. 665). Interestingly, Benson (2008) noted the inherent tension that the school held toward Mr. Brooks due to his expanded view of what constitutes a text: student generated print-centric texts were preferred over multimodal compositions.

Hughes and Tolley (2010) shared experiences working with students composing and consuming "visual essays." The authors considered "the elements of design" – referencing "visual, audio, textual, gestural, and spatial" modes – as they performed a case study of one Canadian adolescent, Sarah's, attempt to use digital media in preparation of the Ontario Secondary School Literacy Test (p. 5). Interestingly, this study bridged using a multimodal pedagogy to bridge the

gap between the privileged Discourse of "the test" and the multimodal affordances of using an alternative to the "standard essay" (p. 6). Several more studies provide empirical evidence of using a multimodal pedagogy within the English Language Arts classroom.

Connors and Sullivan (2012) reported on how the second author – then a pre-service teacher working in the ninth grade – introduced a multimodal composition project around *To Kill a Mockingbird*. The publication, which included student samples, centered on Sullivan's realization that integrating "old" and "new literacies" was an important curricular decision. Richard Beach (2012) reviewed research on ELA teacher's use of digital tools in order to "remediate print literacies" in the secondary ELA classroom. His findings shared the limitations and affordances of conflating digital tools, video games, and e-portfolios within the classroom. Also working with ninth graders, Groenke and Youngquist (2011) used the NLG and associated authors as a framework to conduct an inquiry with twenty-five students at "an affluent, suburban high school" (p. 507) using Walter Dean Myer's (1999) *Monster* as an inquiry text. The data was generated from online conversations the students had about the novel and in-class analyses of the text-image relationships through guided questions.

Working with twelfth graders, Loretto and Chisholm (2012) studied the primary author's classroom as the students made meaning through multiple modes in response to Gardner's *Grendel* and *Beowulf*. The implications of the study found that students were confused by the implementation of multimodal projects: some "exploited the multimodal nature of the inquiry activities in order to transform interpretations and generate new meanings" while others merely "decorated texts" (p. 147). Essentially, the authors concluded that more explicitly instruction and detailed directions were needed in order to distinguish between students who created a literal meaning of the text and represented it visually – drawing a monster versus a more generative product

 developing a shield incorporating elements of design and items not included in the original *Be*owulf poem.

In another twelfth-grade class, Robin Jocius (2013) used data generated from a larger study of two Advanced Placement English classes to see how "multiple forms of media" were used to make meaning while reading Hosseini's (2003) *The Kite Runner*. Jocius noted the impacted of mode switching through multimodal use, selection of modes based upon individual preferences, and the use of a variety of modes as she studied the classroom of a 43-year veteran secondary English Language Arts teacher. Primary data sources included field notes, questionnaires, and teacher and student interviews. Data was also drawn from student-generated texts; half the participants used PowerPoint slideshows and the other half used digital video software like iMovie or Movie-maker. The findings centered on three facets: the modal influences of the tool selected, the creation of tone through the combination of modes, and the manipulation of modes to manufacture humor (p. 318). I couldn't help but think of how Rex – the student in the story of my question – used multimodality in order to manufacture humor in our classroom.

O'Byrne and Murrell (2014) studied the multimodal literacies of 51 participants across three eleventh-grade English classes who used blogs. At an urban high school in West Virginia. During the 18-day project, the teacher-research, Murrell, generated audiovisual data from activities on the blog including "text-based, instructor guided postings and comments to peers, viewing statistics on blogs... and instances of multimodal elements and interactive features added to blogs" (p. 931). The authors concluded that "[following] a blog... does not necessarily equate with engagement and learning," a common assumption that multimodal assignments automatically generate investment (p. 938). However, the participants did have a "desire to create... a defining attribute of digital natives" (p. 939). The significance of this interpretation lies in the fact

that it taps into student modes of making-meaning: text, visual, and audiovisual modes were encouraged in the classroom.

Implications from the Review of the Literature

The preceding sections provided a review of the literature. From my review, I identified several key characters of peer-reviewed and published work. First, surveys unpacked advocatory and empirical research in order to define what the New London Group started: a multiliteracies pedagogy and how it could design social futures. At times, the works speculated what twenty-first century literacies would look like. The surveys of the research also blended into definitional work. At times, the terminology was explored and clarified; at other times, new words entered the lexicon.

Essentially, I have interpreted through a review of the existing body of work a number of conclusions. First, the New London Group (1996), its subsequent chapter (2000), and connected authors broadly impacted the field of literacy studies. The largest impact, in terms of sheer numbers of studies, has been upon post-secondary education – the field from which the piece was published. As the work proliferated, university related studies – empirical and advocatory, including the field of Composition Studies, dominated the literature.

However, and most relevant to this study, advocacy and empirical work has been completed for literacy education within the secondary English Language Arts classroom. The research has helped me reach several tentative conclusions: a multiliteracies approach can increase engagement, serve as a bridge between traditional notions of literacy and multimodal ways of meaning-making, and there is a reluctance by some educators to shift in order to meet the demands of adolescents' social futures due to unfamiliarity with technology. This reluctance isn't

due to indifference; however, it specifically perpetuates the social, economic, and literacies problems the NLG identified. Because this work has been limited in comparison to the broader field of literacy research, this study fills a gap in the empirical work by providing additional research into the multimodal meaning making efforts of English Language Arts students within the classroom. By adding to the empirical research, this study provides additional data, descriptions, and interpretations of what happens when students take up multimodal meaning-making. What follows in Chapter Four is an exploration of how my theoretical framework and the body of knowledge already published informs my study, methodologically.

CHAPTER 4

METHODOLOGY AND RESEARCH DESIGN

The background of this study reflects a hybridity of theories: social constructionism (Berger & Luckmann, 1966; Burr, 2003) and – most importantly – using a multiliteracies approach (The New London Group, 1996) including observed student meaning-making through multiple modes (Jewitt, 2011; Kress, 2011; Kress & Van Leeuwen, 2001). Despite the seeming dominance of the written and spoken word as the primary modes through which meaning gets made, the significance of alternative modes used in endless combinations deserve more attention: gaze, gesture, image, sound, video, layout, and others. As a result of this discrepancy, I take a stance in agreement with Jewitt's (2011) assertion that "there is no monomodal culture," rather, individuals use multiple modes to transact across time and space for meaning to get made (p. 4). Within this framework of multimodality and hybrid theories lies the background of this study.

Prompted by Rex's spontaneous multimodal construction, e.g. #teamsatan, rooted in the literacies of popular culture and internet discourse, this study generates, describes, and interprets multimodal events within the secondary English Language arts classroom, unpacked as transmodal moments (Newfield, 2014). Again, transmodal moments focus "attention on the relational aspect of the transmodal chain, on the way in which a modal shift impacts on meaning and on the way in which the links are connected or discontinuous with one another" (p. 103). As a teacher researcher in this setting, my classroom provided daily opportunities to see these theories transact as teacher, students, texts, and the world get taken up, studied, analyzed, and retold. The classroom as a research site necessitated a research design that was "subjective,

holistic, and flexible" (Klerh, 2012, p. 123). Compounding this is the diverse data archive generated that spans multiple modes entailing a hybrid approach to analysis and representation (Angrosino, 2007; Banks, 2007; Flick, 2007; Kress & Van Leeuwen, 2001; Maxwell, 2013; Rapley, 2007).

While Chapters One, Two, and Three unpacked the story of my study, the underlying theoretical assumptions, and a review of the literature, respectively, it's worth noting again: the empirical research of how multimodality functions in the secondary English Language Arts classroom is limited. From this researcher's perspective, the written word and spoken word are easy to collect and capture for forming a data set according to previous qualitative methodologies. Audio recordings and document analysis have been a mainstay throughout qualitative research (Rapley, 2007). Analyses and findings – as always, of course – are not as easily accomplished. Therefore, I ask a number of questions.

How does one collect multimodal data for analysis? Once collected, how does one create a data set out of variegated modes so that viewing, coding, categorization, and representation of different modes get effectively studied and shared? Furthermore, what methodological approach can be applied in order to identify, describe, and interpret Newfield's (2014) communicative "processes of transmodal translation in chains of semiosis," known as the transmodal moment (p. 103)?

This chapter shares a possibility: a microethnographic approach (Au & Mason, 1982; Chang, 2003; Erickson, 1975, 1984, 1986; Garcez, 2008; Mehan, 1979) guided this study's research design and informed my methodology so that reasonable constructions – through description and interpretation of the data generated – were made. Concisely, Stokrocki and White (1995) defined microethnography as the "description, analysis, and interpretation of a

slice of everyday life" (p. 52). The emphasis, not surprisingly, is on the small, seemingly *invisible* moments of interaction. While this is a good tentative definition, microethnography gets further explored in detail later in this chapter.

But first, the research questions center my goals, methods, instruments, and analytical approach. An exploration of and rationale for microethnography follows. Next is the specific research design – including site, participants, data generation, instruments, analysis, validity, and timeline. Finally, the study's limitations, researcher assumptions, and a timeline is provided.

Research Questions

- 1. What happens when students construct meaning through multiple modes and what are the implications of studying a multimodal pedagogy for English Language Arts classroom?
- 2. What occurs during transmodal moments (Newfield, 2014) and what are the implications of analyzing such moments for the classroom?

Methodology

Following Maxwell's (2013) approach to qualitative research design, I used the interactive model of research design (see Figure 1), one that has an "interconnected and flexible structure," so that I could develop a plan in anticipation of shifts that that occurred (p. 3). These shifts – whether minor ones in data generation or more substantial ones during analysis through description and interpretation – were determined by how better to generate explorations of the research questions.



Figure 1. An interactive model of research design. Maxwell's (2013) approach, visually represented, affords the chance to see the interconnectedness of the research process from ideas, questions, generation of data, analysis, and validity of researcher constructions.

A Microethnographic Approach

By placing the research questions at the center, the other research components reflexively interact with each other, guiding the focus of the study. The questions "focus the study" and "give guidance for how to conduct it" (Maxwell, 2013, p. 75). In order to answer better the research questions, I needed to generate a modal variety of data. Because my intent was to focus on specific transmodal moments (Newfield, 2014) that occurred with the course of classroom curriculum, I used a microethnographic (Chang, 2003; Erickson, 1975, 1984, 1986; Garcez, 2008; Mehan, 1979) approach. The following sections solidify a definition, the roots and range of the methodological applications, key studies, and a rationale for why this particular method best generates data for exploring my research questions.

Microethnographic definition. This methodology is "concerned with the local and situated ecology among participants in face-to-face interactional engagements constituting

societal and historical experience" (Garcez, 2008, p. 257). Donsbach (2008) called microethnography a "video-based ethnography" based in "careful analysis of 'small' moments of human activity." Where traditional ethnographic instruments like observational field notes cannot – hummingbird-like in speed and reaction – capture all the minute details of human interaction, video recording was introduced for a detail analysis of finer gradations. Herein lies a strength of a microethnographic methodological approach.

Aiming to describe "how interaction is socially and culturally organized in particular situational settings" the classroom has been a traditional research setting (Garcez, 2008, p. 257). Microethnography possesses the capacity for investigating "in minute detail what interactants do in real time as they co-construct talking-in-interaction in everyday life" (p. 257). Erickson (1987), a microethnographical founder, asserted that this method helps to interpret and describe "the invisibility of everyday life" (emphasis removed, p. 121). Many scholars and researchers name, as a primary goal of microethnography, to elicit rich, thick, literal, and intensive descriptions and interpretations of social interactions made through language and various modes (Au & Mason, 1982; Bower & Griffin, 2011; Chang, 2003; Cherry, 1994; Erickson, 1986). Au and Mason (1982) specifically noted the methodology's strength as a "fine-grained" (p. 3). Microethnography's roots and its subsequent application created a wide range of perspectives on what constitutes a microethnographic study.

Roots and range. Although Bateson and Birdwhistell "pioneered the use of audiovisual records" (Garcez, 2008, p. 257) as data sources for communication studies, it was the Erickson and McDermott who primarily cemented the reputation of microethnography for studying "language and social interaction" in educational sites (p. 259). Erickson (1986), in delineating qualitative methods in research on teaching, provided an extensive review of the literature.

Including citations from 1906 onward, Erickson outlined the application of microethnographic methods as it evolved from ethnographic fieldwork towards studying classrooms, a mainstay of microethnographic research sites.

Erickson's (1986) chapter unpacked the theories and methods used to study classrooms – from the western European intellectual roots in studying folklore (p. 122) to the development by anthropologists of ethnography by sending "out their students to collect ethnographic information themselves, rather than relying... on the books written by colonial administrators, soldiers, and other travelers" (p. 123). Shifting towards education after World War II, the "key questions [concerning qualitative research in teaching were]: 'What is happening here, specifically? What do these happenings mean to the people engaged in them?'" (p. 124). Interestingly, these are almost the generalized versions of this study's two research questions. These questions work because each new context invites new understandings to unfold and explore.

It was the use of "machine recording as a primary data resource in fieldwork research" that caused the shift towards a more refined ethnography (Erickson, 1986, p. 144). Although Mehan (1979) and Gumperz (1982) labeled a similar approach by other names, Erickson (1986; with Shutltz, 1977), championed machine recording assisted microethnography – in conjunction with participant observation – as a way to offer what Chang (2003) identified as "a narrow focus, offering a detailed analysis of only one type of event" (p. 145). It is the "narrow and in-depth aspects" that became a hallmark of microethnography (p. 145). Thus, it was from the 1970s onward that microethnography took shape and became a more practiced methodological approach. Popescu (2010) noted that the emphasis on "particular 'scenes' in key institutional settings" led to microethnography's increased proliferation (p. 10). Next, in outlining several key

studies, chapters, and papers which adopted or advocated for this approach, I begin to situate this study within the wide range of microethnographic perspectives.

Key studies, chapters, and papers. In a study of classroom reading instruction, Au and Mason (1982) rationalized microethnography as a method for studying and describing the classroom because it allowed for an in-depth look into the "deeply embedded... flow of social interaction[s]" that take place across meaning making transactions. The authors sought to provide a survey of studies and a "brief 'how to' manual" for applying microethnography in researching elementary classroom reading lessons (p. 2). Ogbu (1981) similarly noted the importance of approaching schools as sites for ethnographic research. Noting that the participation structure was the unit of analysis, categories could not be developed prior to data generation; once collected, the development of categories, codes, and networks could be later performed. Au and Mason's (1982) first step in data analysis came through a preliminary cataloguing of the first viewing that lead to increased identification of certain communicative elements: speaking, listening, turn taking, rounds, and the development of a hypothesis of communicative structures. Although the study's goal was to identify effective reading instruction, the conclusion found that microethnography led to "greater specification of variables" found in other approaches" and a better understanding of "the interactional dynamics of lessons" with learners (p. 26). Thus, Au and Mason (1982) completed both a case study and advocated for the continued use of microethnographic approaches in classroom research. Their study set a standard for microethnographic data analysis that was implemented in this research.

Erickson's (1984) created two primary assertions: first, that ethnographic approaches were different from positivist observational reporting, and second, that traditional ethnography is inadequate to the study of schools. Erickson argued that ethnographic approaches should be

"considered a deliberate inquiry process guided by a point of view" over a "reporting process guided by a technique." In other words, my particular microethnographic approach centers on generating data with an eye towards how multimodal transactions contribute to meaning making efforts. Instead of merely reporting a rigid account of "what I see," I aim to describe and interpret according to my theoretical framework and not let my methods dominate the study.

Counteracting a positivist perspective, Erickson (1986) focused on the interpretive nature of fieldwork as a researcher "brings... a theoretical point of view and a set of questions" whether they are "explicit or implicit" (p. 51). Importantly, schools as research sites are "far more complex" than the researcher's "descriptions" of them. The descriptions are mere caricatures, defined as "systematic distortions" (p. 56). In order perform stronger research, according to Erickson, the realization must be made that the "school is a whole composed of parts," and these parts proffer "far too much information" for analysis (p. 58). Therefore, an inquiry process focused on the smaller units within the school community will yield a greater understanding of a smaller fraction of the school community. Simply put, the power lies in the micro approach.

Dillon (1989) performed a microethnography of a secondary low-track reading classroom. In order to "construct a description and interpretation of the social organization" of her research site, a seventeen-member classroom in rural Georgia, Dillon collected data by conducting a year-long in-depth observation of classroom lessons and collected teacher and student artifacts like "lesson plans, textbooks, and assignments" (p. 228). In order to unpack the system of tracking abilities and the effectiveness of Mr. Appleby, the classroom teacher, Dillon used field notes, audio, and videotaped lessons to develop transcriptions on a weekly and twoweek basis. As a participant observer, Dillon had three key informants whose audiovisual data

and subsequent transcriptions were triangulated with structured interviews and questionnaires with a principal, vice principal, the three informants, and Mr. Appleby.

Using Glaser and Strauss's (1967) constant comparative method, the researcher constructed the final analysis based upon listening, viewing, transcribing, and creating theoretical memos. Triangulation was furthered using member checking – using three sessions of rater training – with Mr. Appleby and the administrators. The results found that Appleby – whom Dillon identified as an effective teacher – created an "open, risk-free environment" which contributed to the social organization of the classroom (p. 238). A major contribution of the researcher came through Appleby's own admission that many of his positive classroom interactions are "nonverbal" (p. 241). His "enthusiastic [nonverbal and verbal] mannerisms" convey "respect and care for students" through proximity (p. 242). These were unstructured – given the nature of variability in student responses to classroom lessons and the teacher – and were captured through audiovisual recording and confirmed through the secondary data sources.

Classroom research continued to be an excellent site for microethnography. Evident through other scholarship – Cherry's (1994) thesis for a Specialist's in Education which gathered data from a self-contained second grade classroom, Brozo's (2006) investigation of lacking adolescent voices in school reform, and Bower and Griffin's (2011) case study of the factors associated with lacking parental involvement in secondary schools – the methods of microethnography, audiovisual recording supplemented with participant observer field notes and more, depending upon the study, have established a number of expectations. Video, visual, audio, print, transcriptions, and field notes or memos have been primary methods for data generation. In line with the aforementioned work, this study is situated within the microethnographic tradition.

Rationale. In order to better understand the nature of socially constructed multimodal meaning making efforts within the secondary English Language and to identify and unpack what happens throughout the chains of semiosis across transmodal moments (Newfield, 2014), a microethnographic approach best guided the design of this research. Erickson (1992) argued that this methodology allows a researcher to take "whole events," like classroom interactions during group work, in order to find "smaller fragments" and create detailed analyses (p. 217). Through fragmentation of data and its subsequent construction into a larger pattern, insights were gained into how adolescents construct multimodal meaning. Multiple modes cannot be easily described and interpreted simultaneously; however, the component parts can be described through identification and transcription in order to interpret the significance of communicative acts.

Because the classroom is my site of research, I agree with Erickson (1986): "the nature of" this particular site is a "socially and culturally organized environment for learning" and a microethnographic approach ties well with a social constructionist perspective focused on multiliteracies (p. 120). It is through audiovisual recording that allows me to analyze the "micro level" of "individual, identifiable constituents" like gaze, gesture, speech, and other modes (Chang, 2008, p. 154). By looking at video and audio records of "everyday face-to-face interaction," microethnography can "support the empirical characterization of what people do when they interact... in everyday life" (Garcez, 2008 p. 268). Since a researcher cannot possibly describe *all* multimodal interactions in real-time, audiovisual recording in conjunction with classroom artifacts and generated notes have the capacity to generate a data set from which meaning can be made. Erickson (1986) used the phrase "invisibility of every day" to describe what microethnography unpacks (emphasis removed, p. 121). Fittingly, the methods previously espoused helped make more visible the minutiae of multimodal classroom interactions. This

study's research questions, theoretical framework, and methodology have each impacted the research design which, collectively, is geared towards where I generated data.

Research Design

Research Site

A half hour from a major Southeastern United States university in Georgia – and an hour from a major metropolis – rests Riverbend High School (pseudonyms will continue to be used for locations and people). The school itself has a history of being in a rural and agricultural county, but the area has expanded significantly over the past couple decades in terms of population diversity and commerce. Urban sprawl from the state's capital has certainly made its impact.

The school currently serves over 1,800 students with over seventy percent receiving free and reduced lunches. It has been a Title I school for seven years, receiving federal funds that have been spent on a variety of supplemental materials and teacher training. For example, technology for student use, technology for teacher use, traditional books, and for developing new curricula. Most federal funds have been spent with the aim of preparing students for 21st century colleges and careers. This reflects the shift from No Child Left Behind (2001) and its measurement of school effectiveness indicated by Adequate Yearly Progress towards the College and Career Readiness Performance Index (2013). Although a "College for Every Student" banner was prominently displayed at the school's entrance from 2007 to 2012, River Bend High School shifted its focus towards preparing students for their possible futures, whether that be directly to the work force, military, technical school, or four-year university.

This following information gets shared in order to help unpack the research site.

Currently, Riverbend High School has a somewhat diverse and cosmopolitan population (See



Figure 2).

Figure 2. Student demographics from 2017-2018. It is through this population that I selected my four key informants.

Participants

Participant observation historically involved an outside researcher entering the domains of their study in order to explore their research questions. As an established practicing teacher at the study's site – and having designed the curriculum – I acted more as an observant participant recording learning experiences. My sample class included twenty-one students and a paraprofessional helping a student with special needs. I selected a small group of four students to record as they completed small group work. These students were identified using purposeful selection (Patton, 1989; Maxwell, 2013; Seidman, 2013) which highlighted my intentionally flexible approach to research design. Doing so created a selection group who "provide[d] information that is particularly relevant to" my "questions and goals" (Maxwell, 2013, p. 97). These participants were placed into a semi-circle, for ease of audiovisual data generation over a two-week period of time. The remaining members of the class also completed group work as a circulated the classroom, facilitating instruction. However, how did this particular group get selected in regard to my methodological approach?

While Patton (1989) cautioned against convenience sampling – I chose students within my school and classroom – I assert that these are students with whom I built a "rapport" across the semester and, therefore, was more familiar with their personalities, strengths, areas of improvement, and preferred modes of expression (Angrosino, 2007, p. 32). In short, well-established relationships provided me with a data that has the potential to answer my research questions due to my familiarity with the students' lives; never mind the notion that the core of effective ties lies in sustained community-building across the semester (Fecho, 2004).

In order to reflect a diversity of perspectives and modal resources, selection was based upon diversity in race, gender, class, and ability. From these students I selected a group of that generated meaning-making events replete with transmodal moments that addressed my research questions. The following section outlines the specific four participants that were chosen.

Participant Profiles

Johannes. A second-generation student of Eastern European descent, fifteen-year-old Johannes was a male student enamored with progressive rock music. Playing bass guitar in his free time, he was bored with school and listened to music or watched bass lesson videos on his iPhone, often at the expense of instructional time. Although academically sharp and capable, this lack of scholarly interest led to lower grades across his subject areas possibly due to his disconnect with traditional approaches to education. Johannes's deadpan sense of humor and willingness to share his opinion were a benefit towards meaning-making efforts. His disconnect in class, stemming from disinterest and – sometimes – lack of sleep impacted participation in group work.

Nimer. Of Middle Eastern descent, fifteen-year-old Nimer was a respectful female who excelled academically. Typically quiet, she was willing to provide answers, opinions, and ideas. However, Nimer was quick to point out injustices, whether in the novel, relevant current events, the classroom, or during hypothetical discussions about social issues. Nimer patiently, but regularly contributed towards group work often having led the effort toward completing tasks.

Tucker. A white fifteen-year-old male, Tucker identified primarily as an athlete playing on our football team. However, his prowess on the baseball field – in season at the time – displaced this. Prone to sleep during class or spend time on his iPhone, he was less academically inclined. However, given his athleticism, textual stimuli or student responses that piqued his interest were often met with vibrant physical displays including shifts in gaze, posture, gesture, and verbal responses. His hobbies outside of school included hunting and working on his truck.

Brittany. A white fifteen-year-old female student, Brittany was more than willing to provide answers to questions and – if they followed the anticipated initiation-response-feedback variety – she was often correct. Although academically gifted, Brittany was slightly anti-social and preferred to work on her own. She worked no jobs outside of school and did not participate in athletics. However, she always had a book in class and wireless headphones around her neck – the earbuds of which would promptly return inside her ears when she finished individual class work.

Data Generation

The data generation process reflected several questions: what data best explored the research questions, how did a microethnographic methodology best guide design decisions regarding the generation of data, what time period best functioned for studying transmodal

moments, and what instruments best captured transmodal moments for fragmentation, transcription, description, and interpretation?

Research questions. In order to explore my research questions, my data generation methods were designed to create a "digital archive" that contained multiple modes (Rapley, 2007, p. 10). As such, I start with the type of data to be collected: the spoken word, the written word, gesture, body language, noises, song, illustrations, space, layout, and touch. These were the primary modes that got combined as learning occurred across the scope of this study. Bearing in mind the diversity of modes to be generated for capture, I know that participatory field notes would fall short. Therefore, a microethnographic approach, rooted in audiovisual recording helped capture "invisibility of every day" interactions through the unique qualities of video (emphasis removed, Erickson, 1986, p. 121). While field notes were used, they were later expanded in Google Drive and imported into ATLAS.ti for analysis. The next section rationalizes why and how this was done.

Microethnography as methods. Video recording, for the researcher, generates three primary forms of data: moving image, audio, and – when paused – static images. These data reflected what Taleghani-Nikazm (2015) noted about literacy classroom participants in conversation: they "deploy[ed] an array of semiotic resources to accomplish and coordinate coherent social actions collaboratively." Using various modes "such as talk, gaze, prosody, gesture and body posture, participants" construct meaning through social interactions (p. 80). Again, video records were the primary data generation instruments for gaining insight into the multimodal constructs of my participants. Yet, audiovisual data were not the only type to be generated.

Although a mainstay of traditional ethnographic practices, field notes are effective data generation instruments as the allow for "regular, systematic ways" in which a researcher "observes and learns while participating" in the lives of their participants (Emerson, Fretz, & Shaw, 2011, p. 1). In this study, rather than traditional field notes, I took a different approach. Shorthand observational notes served a variety of purposes: they covered "the recruitment process," note-taking (Rapley, 2007, pp. 38-39) during group work, after group work, and got expanded digitally, after class, to further describe and interpret the daily events more narratively and – consequently – more analytically. While on the subject of time, the following section rationalizes an appropriate time period for data generation.

Time period. I selected a two-week window of time, the length of a typical unit, to create a limitation on the amount of data to be gathered. Microethnography has been called "onerous" requiring "great attention and time... limiting the amount of data that can be processed" (Garcez, 2008, p. 266). Considering the breadth of modes used within the classroom, a reasonable beginning, middle, and end of multimodal communication acts was established.

Again, since my participants came from a researcher-selected panel (Weiss, 1994) of individuals who were in the midst of my classroom as they accomplish group work, the multimodal constructions they generated – subsequently gathered as audiovisual data – initially were identified as transmodal moments (Newfield, 2014). Due to the unpredictable nature of student interactions, a two-week window of continuous data collection, thirty to forty-five minutes a day during group work, provided enough time to capture an estimated three to five significant meaning making transmodal moments for modal fragmentation through coding, transcription, description, interpretation and analysis. In other words, I anticipated that

approximately ten thirty-minute recordings would yield three to five significant transmodal moments for analysis.

Although "audiovisual machine recordings" have been a staple of microethnography since the 1970s, technology's impact upon qualitative research has been profound (Garcez, 2008, p. 257). Large video tape recorders have been replaced by less physically intrusive digital devices with more advanced capabilities to transfer recordings (Rosenstein, 2002; Jewitt, 2011). An intentional selection of modern research instruments generated the data necessary to answer the research questions.

Instruments, description of tools, and sources of data. Instrument selection was guided by traditional microethnographic methods and this study's theoretical framework; knowledge gets socially constructed through transmodal moments. As a result, a variety of instruments (see Figure 3) were selected based upon their cross-compatibility, ease of use due to researcher familiarity, cloud-based connectivity, and – of collective significance – their ability to record, store, code, and retrieve multiple modes of data. This data was broadly divided into two forms: primary and secondary data sources.

Primary data sources included audiovisual recordings and the subsequent transcriptions. Transcriptions, however, did not occur until the data analysis phase began and an initial viewing of the archive (Angrosino, 2007). Given the "great attention and time" of using microethnographic methods and the sheer "amount of data that can be processed," transcriptions needed to be strategically focused on transmodal moments (Garcez, 2008, p. 266). Ultimately, I selected the three moments that best helped explore the research questions.

One general type of data transcription was constructed through the generated audiovisual data archive. Specifically, I used Rapley's (2007) video-based transcriptions which focus on

gaze, touch, gesture, posture, spatial positioning, and other actions (pp. 64-65) and a basic verbatim transcript to capture speech, pause, and other verbal utterances – like laughing, scoffing, et cetera (pp. 52-53). This choice reflected the multimodal data recorded. Secondary data sources are short hand notes, the extended typed notes including lengthier descriptions of events (Emerson, Fretz, & Shaw, 2011), and static images of student work, should their work have been of significance to this study.

Primary and Secondary Data Generation Sources	Storage and Organization Device	Connects to Research Question	Analysis Process
Audiovisual recording	Two digital camcorders, two digital audio recorders, data uploaded to Google Drive, downloaded to home office computer, and backed up on external hard drive	R1, R2	Preliminary viewing (Angrosino, 2007; Au & Mason, 1982; Erickson, 1986, 2011; Change, 2003; Garcez, 2008), then audio transcription (Rapley, 2007) and video transcription (Rapley, 2007) based upon salient transmodal moments (Newfield, 2014)
Transmodal audio transcription	Developed in ATLAS.ti, stored on home office computer, and backed up on external hard drive	R1, R2	Supplemented audiovisual transcription (Rapley, 2007)
Transmodal video transcription	Developed in ATLAS.ti, stored on home office computer, and backed up on external hard drive	R1, R2	Transcriptions (Rapley, 2007; Bezemer & Mavers, 2011), fragmentation (Newfield, 2014) into individual modes, coding modes (Newfield, 2014), category development (Angrosino, 2007; Rapley, 2007)
Observational notes	Physical researcher notebook	R1, R2	Observational notes were expanded descriptions and tentative analysis through expanded online researcher journal (Erickson, 1986; Emerson, Fretz, & Shaw, 2011)
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Extended narratives	Cloud-based Google Drive expanded online researcher journals	R1, R2	Used in coding, development of categories, and developing visual networks in ATLAS.ti (Erickson, 1983; Paulus, Lester, & Dempster, 2013; Friese, 2014)
Visually captured student work	iPhone 7+, Student Google Accounts, uploaded to Google Drive, downloaded to home office computer, and backed up on external hard drive	R1	Used in coding, development of categories, and developing visual networks in ATLAS.ti (Erickson, 1983; Paulus, Lester, & Dempster, 2013; Friese, 2014)
Researcher memos	ATLAS.ti	R1, R2	Generated during analysis, researcher memos track changes, significant categories, aid in analysis, and validity.

Figure 3. Data generation: Instruments as devices, description, and purpose. This matrix arranges the primary and secondary data generation sources, storage and organization, devices, connections to research questions, and the analytic processes used.

Another couple of instruments are worth mentioning: an online digital journal for expanded researcher notes and researcher memos regarding design and generation decisions and ATLAS.ti, a qualitative data analysis software capable of functioning as both a "digital archive" for multiple modes (Rapley, 2007, p. 10) and as a "textual laboratory" (Konopásek, 2008). Paulus, Lester, and Dempster (2013) noted that ATLAS.ti allows researchers "to read, annotate, code, visualize and interpret in one space" (p. 121). Within ATLAS.ti, I stored, retrieved, coded, and visualized the data as networks. Gilbert, Jackson, and di Gregorio (2014) asserted that ATLAS.ti affords a space to "organize" and "explore" (p. 225) data that might otherwise be excessively "messy" (p. 223). While this rationalizes the use of data analysis software, how did the analysis itself take place?

Analysis

A primary goal of qualitative research, Flick (2007) asserted, "is to identify some kind of generality" (p. 29). Having collected and generated a variety of data, this study used two main approaches to data analysis in order to reach an understanding of multimodality within the secondary English Language Arts classroom: descriptive analysis and theoretical analysis. First, the data archive was described and interpreted to create narratives out of the three selected events. This did not occur until a preliminary viewing (Au & Mason, 1982; Bezemer & Mavers, 2011) of the audiovisual data archive. Second, the data generated was described through the unit of analysis: the transmodal moment. Next, the data were interpreted theoretically and explored the research questions, specifically. Several questions helped me respond: What are these moments showing? What patterns do I interpret? What is happening as students make meaning across chains of semiosis?

Angrosino (2007) asserted that there are two main approaches: descriptive, "the search for patterns," and theoretical "the search for meaning in the patterns" (p. 75). Using descriptive analysis, I took "the stream of data" and broke it down "into its component parts" in order to identify patterns and construct categories across transmodal moments (Angrosino, 2007, p. 67). But, identification was not enough; I relied upon theoretical analysis – tying my theoretical approach – to figure out how "those component parts fit together" as a whole (p. 68). A specific process guided my approach that tethered traditional ethnographic methods with microethnography. Erickson (1992) asserted that a microethnographic approach to analysis of

"interactions is labor intensive" (Garcez, 2008, p. 266). Therefore, a flexible approach drove research design – again, given the unpredictable nature of classroom interactions.

Developed by Angrosino (2007, p. 70), I followed three primary stages for analysis in traditional ethnographic research: data management, an overview reading, and clarification of categories. Having taken this approach in conjunction with Au and Mason's (1982) case study process, I strategically identified particular transmodal moments from the three events that better explored my research questions.

Data Management

First, the data shifted from being generated towards being processed for the analysis phase. After getting generating data on audiovisual recording instruments, the data were transferred to a password-protected Google Drive account. This ensured security, transportability, and ease of access for the researcher. Once in the secure cloud, it was stored at a home computer in addition to a backup external drive. All data were password protected.

The audiovisual data, static images of student artifacts, and online researcher journals also were downloaded and imported into ATLAS.ti so that "continued revisitation" occurred in the microethnographic "process of reviewing the whole event numerous times" (Garcez, 2008, p. 266). This qualitative data analysis software (QDAS) excelled at storing, coding, managing, and retrieving a variety of digital formats to aid in analysis. Although used for traditional ethnographic methods, Angrosino's (2007) three stage approach functioned well within the microethnographic tradition, especially during the second stage.

Overview Reading

After the data was digitally copied into a location for management, the overview reading began. Although Au and Mason (1982) labelled their approach as "preliminary cataloguing," I

found the terminology to be stifling (p. 10). Therefore, through the first reading pass – i.e., viewing and listening to the audiovisual data – I identified four crucial multimodal events for analysis. This was later narrowed to three due to my subjective interpretation as which ones were more significant. These moments were identified according to several criteria: a large number of modes, particularly interesting combinations of modes, and significant social interactions that particularly reflected how modes get used across semiotic chains. This first pass, a pass which limited the salient transmodal moments for scrutiny, was necessary in order to determine what transcriptions get generated.

Recording approximately thirty-minute sessions for a two-week period and transcribing them all could generate massive transcripts; therefore, I first identified brief, but salient classroom events ripe for exploring my questions. The brevity – thirty to over-two-minute-long episodes – allowed for an in depth look at multimodal meaning-making. After this first pass and subsequent generation of transcripts, a second pass of the videos, supplemented by transcriptions, helped to identify patterns across the transmodal moments in order to answer what was happening as student constructed meaning multimodally.

Whereas Au and Mason (1982) looked for "different types of participation structures," I looked for how modes got used – which were dominant, how modes were combined, and the patterns I recognized in vocal utterances and nonverbal responses (pp. 11-12). The burgeoning patterns identified were stored as researcher memos within ATLAS.ti prior to the development of smaller gradations through specific codes. These codes (see Table 1) initially focused on the mode(s) used as part of fragmentation process, prior to analysis of transmodal moments as a whole. Recording preliminary categorical patterns as researcher-generated memos within ATLAS.ti – and linking these memos to particular chunks of transcriptions and video – helped create connections that were later visually constructed as charts listing the modes used and which student used them.

Table 1

Codes, Refined Codes, Description, Connected Themes

Broad Code	Refined Codes	Description	Connected Themes
Speech	Laugh	Participant vocal utterance, whether language-based or sound-mimicry	Engagement, Multimodal
Shift in Gaze	Towards Speaker Away from Speaker	Participant shifted gaze toward or away from another participant or object	Engagement, Multimodal
Gesture	Mimicry Hiding Face	Participant uses hands as mode	Engagement, Multimodal
Shift in Body	Towards Speaker Away from Speaker Towards Stimuli Away from Stimuli	Participant shifted posture	Engagement, Multimodal
Use of Computer	On Task Off Task	Participant used technology	Engagement, Multimodal, Awareness
Use of Cell Phone	On Task Off Task	Participant used technology	Engagement, Multimodal, Awareness

Clarification of Categories and Connected Themes

Erickson (1984) stated, "one basic task of data analysis is to generate... assertions, largely through induction." By reviewing the data archive, I "[established] an evidentiary warrant" for my study's "assertions" (p. 146). But, through the explicit clarification of categories – defining the specifics of the transmodal moments selected for scrutiny – I constructed meaning beyond "descriptive-level analysis" (Friese, 2014, p. 17). The meaning made was through "*construction*" and "through critical analysis" by finding linkages found in the theoretical literature and throughout the data archive (emphasis in original, Paulus, Lester, & Dempster, 2013, p. 50). Starting with codes through the first pass of my transcriptions, I later refined these codes through additional readings, supplemented by viewing the audiovisual data of the three chosen events.

Herein, again, descriptive analysis through transcriptions and subsequent readings led to more finely tuned theoretical analyses, allowing me to generate claims about how transmodal moments contributed to the social construction of knowledge within my particular context, the secondary Language Arts classroom. However, I realize that generalizability in my study's context does not extend to all other secondary Language Arts classrooms; instead, adaptability is more important.

A major caveat exists at this point: specific categories and patterns varied based upon the data gathered. Initial readings, again, determined the significant events, eventual transmodal moments for analysis, and the subsequent development of multimodal transcripts (Bezemer & Mavers, 2011). Second, third, and fourth readings allowed me to unpack specific modes, how they got used in conjunction with each other, and how – with data-specific examples – the four participants socially took up the task of making meaning with the curriculum. Finally, I made more conclusive sense of the findings through constructing themes.

Connected themes in Table 1 are broadly identified and they were later refined as follows: Engagement included whether participants were or were not involved in an activity; Multimodal referred to the *nature and mode(s)* of the meaning-making moment as engaged, aware, as an interventional interruption, as an invitation to conversation or – broadly – an

unanticipated result; Awareness was refined as Teacher Awareness of student knowledge, use of humor, validation of student multimodal responses, or role-play.

Next, in order to provide a better understanding of what specific reactions might occur, the following section outlines my teaching approaches and the curriculum with which students transacted to socially construct meaning.

Curriculum and Pedagogical Approach

Having taught at my research site for nearly a decade, a number of curricular shifts have occurred. These reflected changing national, state, and local attitudes towards education, standardization, assessment practices, and what student intellectually and socially need to be career and college ready. As a teacher researcher, my pedagogy reflects my formal education and experience inside and out of the classroom. Like the New London Group (1996) and their subsequent book chapter (2000), I saw growing inequalities as the result of what gets valued as important for study in addition to whether or not a multiliteracies approach is adopted. In other words, at the extreme end, there are educators using textbooks that are fifteen-years old. These are used in conjunction with worksheets that may be older; word-processed handouts belie the purple mimeographed originals. While the social construction of knowledge (Berger & Luckmann, 1966) still occurs with these texts across the study of language (Burr, 2003), the design of social futures (The New London Group, 1966) gets neglected.

Why particular curricular shifts matter. Significantly, dated approaches might not reflect the shift towards global communication and an understanding of the variety of more recent forms of making meaning through digital tools and an understanding of the impact that multimodal texts have had upon learning (Youngs & Serafini, 2013). As a result, the students are not making meaning as effectively as possible due to curricular emphasis on traditional reading

and writing. Furthermore, students are being denied ways to be economically and globally competitive. This is not to say that social injustice occurs as a result of a malicious intent from teachers unwilling or reluctant to update curricula, but rather that a dated approach to English Language Arts does not effectively prepare students for the future. A few small examples from my experience unpack this further.

I have worked with administrators who believe in the importance of classically valued content – American and English literature over writers that are more diverse. I also worked with administrators who believe that competency in smart phone apps, like Facebook, Snapchat, and Instagram, translates directly towards computer literacy. As such, many assumptions get made as to what students know and can do and what teachers should do in order to add to their knowledge and skill sets. In contrast, the globalization of the world and the privileged access to the dominant Discourse that affluent students may have further the knowledge and skills gap. A brief, but poignant shift towards a multiliteracies approach – in contrast to a more traditional, conservative approach – were best represented in the curriculum reflected during this study.

This particular curriculum. Although I better unpack the goals and reactions of the students to the scholastic unit under study in Chapter Five, the following is a brief description of the curricular materials.

The anchor text for the unit is William Golding's (1954) *Lord of the Flies*. While the text has been an often-used staple of Riverbend High School's tenth grade curriculum since the school's opening over fifteen-years ago, my approach added not only a newer, multimodal approach, but tied in various TED Talks, video lectures, podcasts, and supplemental psychological articles in order to explore the natures of good, evil, order, chaos, and the

willingness of groups to follow others. This exploration was primarily done through reading, viewing, listening, role-playing and gets

Teaching methods. In this study, the data archive – represented according to time generated and type of data format in Appendix A – was generated from aforementioned unit. Students broadly consumed a variety of texts, articles, and film. Specifically, students individually and collaboratively spoke, annotated texts, took notes, responded to questions, roleplayed, illustrated, and ultimately reacted to the variety of texts through synthesis writing – which remained in their unit packet. As a teacher, I provided feedback through speech, proximity, comments upon paper, and suggestions through Google Slides's commenting feature.

Just as students make meaning multimodally, I responded through a variety of modes to assess and provide praise, suggestions, and feedback for growth. Although the final assessment reflected a more print-centric approach, and was not recorded during this study, the path leading towards the product was laden with transmodal moments. These transmodal moments, my constructed understanding of what happened, graphical representations and my exploration of data generated are shared through a final write-up in Chapters Five and Six. Yet, how specifically did they get represented and why?

Representation of the Results

Once the data were generated, a representation of my descriptions and interpretations followed a preliminary plan that subject to change. Since I did not know how the modes would get used, nor how they were combined for meaning making, I did not initially know the patterns I would identify, describe, and interpret. However, I did know that thinking with theory would help. As such, a flexible methodological evolution of the microethnographic data archive (see Appendix A) transpired.

My clarification of categories developed organically as an extension of the overall microethnographic "iterative inquiry" (Grbich, 2013, p. 17). In order to "bring to life" the transmodal moments across three key events in the study's setting, I reconstructed the exchanges from transcriptions developed after preliminary viewings in order to forms responses to the study's first research question (Au & Mason, 1982, p. 5). These more accurately depict the "social organization features" of the transmodal moments in action, but also describe and interpret the multiple modes "deeply embedded in the flow of social interaction" of the study's participants (Au & Mason, 1982, p. 2). To clarify, these constructions were as literal as possible. Although I included my burgeoning subjective analysis, the modes the students used were as literally represented as possible.

For the second question, I relied upon Newfield's (2014) transmodal moment. This idea expressly focused on the modal punctuations within and along the semiotic chain of meaning making. These moments *have* to be connected in order to understand the implications behind why specific modes were selected. Audio data yielded words, pauses, inflections, impressions, and other vocal reactions – i.e. gasps, laughs, or screams. Video data yielded gestures, gaze, and physical reactions to the text(s) under study. First, the three moments were identified through preliminary viewings. Next, they were transcribed. During analysis, these moments were broken down through coding, fragmented, and reconstructed in order to understand what happened while students make meaning multimodally.

Therefore, the representation of my understanding came through a variety of written and graphic constructions validated through excerpts from the transcripts, still images, figures that reflected the multiple modes employed across transmodal moments, and Newfield's (2014) own schematic outline. Again, this representation of my conclusions depended upon both the three

events chosen and the patterns of meaning-making identified. They were described in thick, rich detail, constructed from repeated analytical phases.

For a more specific explanation of the transmodal schematic outline, Newfield (2014) first described a punctuation or "moment of fixing" in students' transmodal semiotic chain, such as students hearing, physically and verbally reacting to a text, and then discussing the meaning (p. 109). This was considered Text A. Next, Text B represented another transmodal moment occurs as students then draw or write a response, based upon their modal choices. As the process moved along transmodal moments, students created additionally artifacts: praise poems, cloth maps, and a class-wide anthology representing a "culminating text in the chain of transmodal semiosis" (p. 110). After constructing a list describing these items, Newfield then developed a discussion based upon recognized categories; for her "modal redesigning and transformation of meaning," "liminality and border-crossing," "temporality and spatiality of the transmodal moment," and the "transmodal moment and learning" (pp. 111 - 113). In this way, description through listing – supplemented with salient excerpts – and discussion through the identification of categories – tethering excerpts with theory – led to a method of presenting the researcher's perceived instances of transmodal moments validated by the data archive and theoretical framework.

Validity

Maxwell (2013) asserted "validity is the final component" of design and is crucial to address in qualitative research (p. 121). As such, careful consideration was given towards understanding how the concept of validity functions within Maxwell's Interactive Model of Research Design (p. 5). This model helped me reach conclusions that are reasonable, of solid quality, and useful for understanding how multimodality functions within my classroom. Flick

(2007) asserted that good "ethnographies are characterized by flexible and hybrid use of different" data collection methods (p. 89). By using audiovisual recordings in conjunction with transcripts, research journal entries, and additionally generated data, this multimodal form of data generation is supported by a microethnographic approach. However, I next address two necessary precautions: researcher bias and reactivity in order to strengthen the study's results.

Researcher bias. It is "impossible" to eliminate how my "theories, beliefs, and perceptual lens" impacted my findings (Maxwell, 2013, p. 124). However, shifts in understanding how the cringe worthy concept of viewing my participants as human subjects (Moje, 1996), rather than as "collaborators" helped me reach a greater understanding of the multimodal phenomena (Angrosino, 2007, p. 88). As an observant participant, my research flexibly developed along the way. Predisposed biases evolved, altered, and were challenged every day. These alterations were traced through the online researcher journal and are shared in Chapter Five.

Since I did not adopt a "mantle of detached scholarly objectivity," I was capable of making tentative observations (Angrosino, 2007, p. 89). This willingness to be flexible kept me "wobbling" (Fecho, 2013, personal communication), uncertain, but willing to shift my views according to each interaction. Ethnography, after all, results from transactions across researchers and participants (Angrosino, 2007). My daily journal observations, online expanded descriptions, data archive, audiovisual transcriptions, and subsequently constructed results helped to ensure that more accurate descriptions of the multimodal phenomena were represented without being rigid to preconceived notions based upon personal experience.

This flexibility was stated by Flick (2007): the "use of all possible sources of information as data that is suggested for ethnography" allows for "getting multiple *kinds* of documentations,

so that evidence does not rely on a single voice" (emphasis in original, p. 77). As such, data got weighed, compared, and formed a more complete picture of meaning-making. This sentiment strengthened my rationale for using multimodal data sources over my personal experience of making meaning across modes.

Reactivity. Although my ethnographic approach towards data generation, collection, and representation of the findings inherently relied upon my interpretations of multiple modes in the secondary English Language Arts classroom, methodological literature – and my theoretical approach – created space to help me reach tentative conclusions. Becker's (1970) discussion of reactivity acknowledged and supported my concerns about validity threats: "in natural settings, an observer is generally much less of an influence on participants' behavior than is the setting itself" (as cited in Maxwell, 2013, p. 125). Although, as a teacher I controlled the curricula, I did not control the responses to the readings, viewings, and interactions across participants in the study. By collecting a variety of data, I drew upon multiple modes as a *strength* for reaching conclusions that do not stem solely from my own experience, but from the students in my classroom.

Other Considerations

This study was also positioned with some other potential considerations: potential theoretical contradictions, the use of a microethnographic approach entrenched in tradition, the use of qualitative data analysis software, and the unpredictability of a secondary Language Arts classroom. The following paragraphs better explain each of these considerations.

Kress and van Leeuwen (2001) noted two major components of multimodal communication that contributed to this study's limitations. First, the "semiotic resources [emphasis removed] of communication, the modes and the media used" and second, "the

communicative practices in which these resources are used" limited the data generated (p. 111). Street (2003) noted that literacy "comes already loaded with ideological and policy presuppositions that make it hard to do ethnographic studies of the variety of literacies across contexts" (p. 78). Compounding these ideas, my interpretation of these modes and the resources which my participants drew upon were further limited by a) the length of the study, b) my audiovisual methods of capturing multimodal communication, and c) the data that gets generated during the study's timeframe. I could not record all interactions taking place within the frame of a video. Students outside the participants interacted in meaningful ways but could not be referenced as a result of privacy and methodological limitations. Furthermore, I could only record during the specific two-week period in order to seek out significant and salient transmodal moments. However, I did reference modes not captured by the audiovisual process as they pertained to the chosen events for analysis.

While my interpretation of the modes and resources of multimodal communication get addressed as researcher subjectivities and assumptions – theoretical and personal biases in a following section of this chapter – the microethnographic methodological limitations of capturing multimodal phenomena were present in the study, regardless. Inherent in collecting different modes is that they have to get represented in a dissertation format, typically through the written word and accompanying figures. Although findings are always interpretive, some unique obstacles laid in translating the complexities of visual, gestural, and kinesthetic data as words.

As Kress and van Leeuwen (2001) asserted "[semiotic] resources exist in different ways for different people and groups" (p. 112). Kress and van Leeuwen addressed this problem with the unique example of attempting to develop a "grammar' of smell" (p. 125). While aromatherapists have specific vocabularies to describe sensory data, they still rely on

descriptions that fall short of the experience. Similarly, my task was to use written words, static images, and associated vocabularies to best represent the complexities of my participants' communicative practices as findings on the printed page.

Microethnography is time-consuming and generates a significant amount of data. At bare minimum, I planned for three hundred minutes of audiovisual data to be screened in order to identify three to five multimodal moments to get transcribed. Simply put, the amount of data limited what was accomplished, yet – consequently – provided a wealth of information for exploring my research questions. In practice, this study generated four-hundred-twelve minutes and thirty-seven seconds of audiovisual data in addition to sixty-seven – what ATLAS.ti refers to as – documents, or digitized student samples of writing or digital constructions. Appendix A better shares the timeline, data generation specifics, and each file generated during the research process.

Another potential problem laid in using qualitative data analysis software. Although Friese (2013) cautioned that "complex software can get in the way of analysis," Davidson and di Gregorio (2011) advocated using ATLAS.ti because of the "possibilities for working with multimodal data" (p. 627). Therefore, the learning curve, unforeseen updates to the software, and unpredictable crashes provided obstacles to data organization, retrieval, coding, and transcription development.

A final limitation stemmed from the nature of this study: I did not know what would happen and how students would react to the curricula and each other. However, therein laid a strength; this novelty provided a fresh look into the multimodal phenomena with up-to-date popular culture references, modes that were combined in potentially new ways, and – as an observant participant – my actions and interventions played a role in data generation. However,

given my involvement in this capacity, what were the ethical concerns of doing an interpretive microethnography?

Ethical Considerations

Borrowing from Green and Thorogood (2004), there are four principles of research ethics: autonomy, beneficence, non-maleficence, and justice (p. 53). While these were developed "against the background of healthcare ethics," these principles are applicable to this study (Flick, 2007, p. 123). First, I respected the rights of the individual. My participants are anonymously referenced and were given space to respond to the curricula without prompting and planned interventions. Connectedly, the university's Internal Review Board reviewed the research proposal ensuring another layer of sound ethical considerations and sanctioned approval.

Second, I ensured that the aim of this study was to do good. As a descriptive microethnography, the goal was help fill the gap in understanding multimodal communicative practices within the secondary English Language Arts classroom. Although the topics addressed in a particular lesson plan had moral, political, or challenging dimensions, the goal remained to never intentional discomfort participants beyond reasonable tension. This dovetails well with the third principle identified above: non-maleficence. The fourth part, however, carried complexities.

Teaching is inherently political (Fecho, 2013). The decision of whether or not to address topics within the classroom carries weight. The curricula developed within my class was impacted by my post-secondary education at the University of Georgia. As such, a social justice bent pervaded my daily lessons. Students interacted with texts and activities in order to gain a greater understanding of power, privilege, and how identities transact. The goal, as always, was to question with purpose. Why does a certain phenomenon occur? What actors take part in this phenomenon? What are the effects of this phenomenon? Who gets represented? Who gets

misrepresented? What can be done about these issues? By studying how these issues get discussed, this multimodal research study is a practice in understanding how a social-justice oriented pedagogy functions, at a meta level. However, as this paragraph broaches the subject, I next unpack my subjectivities and assumptions.

Researcher Subjectivities and Assumptions

While Chapter One explored the story of my question, it also highlighted many of my subjectivities. My experience consuming media across multiple modes fuels the ways in which my lesson plans as a teacher are structured. As a reflective practitioner and researcher, I have constructed a hybrid theory of how meaning gets made. I assumed that my participants were also aware that we use multiple modes as communicative events. These events are fixed in time and space, but the meaning gets interpreted differently – and in a near infinite variety of ways – based upon contexts. These contexts, for this study's participants and myself, varied as a result of prior knowledge, experience, socioeconomic status, and the seemingly infinite daily variables that can impact interpretations. Additionally, compounding this, I assumed that although a consensus of meaning can be reached about a word, a text, an image, or any other modal utterance, there can always be another interpretation – hitherto unexpected.

As the story of my question shared, Rex's utterance of "Hashtag Team Satan" was an unplanned, but serendipitous reaction to an old Anglo-Saxon text. Unless I taught that specific concept again, I cannot guarantee it will ever get uttered anew. That utterance especially is why this research is important. How does multimodal meaning making get taken up within the secondary English Language Arts classroom? What are the implications of using a multimodal pedagogy as advocated by the New London Group (1996)? Considering my own experience, I already assume that the implementation of a multimodally designed pedagogy will benefit

students in terms of developing literacies and creating a space for power to get discussed,

questioned, and shifted.

Timeline

In order to effectively conduct this study, a semi-structured timeline ensured that a schedule was followed (see Figure 4).

Steps	Activities	Dates
1	Planning and preparation	
1.1	Develop research questions	April, 2015
1.2	Conduct literature review	January, 2015 to April, 2017
1.3	Develop protocol	January, 2016 to April, 2017
2	Research tools development	
2.1	Pilot recording protocol	August - October, 2017
2.2	Pilot uploading protocol	August - October, 2017
2.3	Pilot downloading protocol	August - October, 2017
3	Planning and logistics	
3.1	Inform students and parents of study	August, 2017
3.2	Narrow down participant group of students	August, 2017
3.3	Obtain consent from participants and permission from parents	August, 2017
4	Formal data collection	
4.1	Collect data	October - November, 2017
4.2	Transcribe audio and video	October - November, 2017
5	Analysis, reports, dissemination	
5.1	Analyze data and construct literal narratives based upon transcriptions	October, 2017 - March, 2018
5.2	Write report	October, 2017 - March, 2018
5.3	Delete data collected	May, 2018

Figure 4. Research timeline. Adapted from Partners 4 Prevention (2017), this figure delineates the timeframe for the study.

CHAPTER 5

RESULTS

At its core, this study was founded upon several theories. Humans communicate through combinations of multiple modes (Jewitt, 2011; The New London Group, 1996) in order to socially construct meaning in their lives (Berger & Luckmann, 1966). The modes they use and the meaning they make are attached to pre-existing beliefs, personal histories, and group identities (Berger & Luckmann, 1966; Gee, 2008). Furthermore, the modes preferred and the modal capabilities of students can influence the social futures (The New London Group, 1996) of these individuals and their ability to succeed socially and economically on the global scale. However, despite a call for a shift in how literacy educators employ multiliteracies and assess what constitutes reading and writing – or consuming, synthesizing, and creating – the body of empirical evidence is lacking in how students and educators take up a multiliteracies approach within the secondary English Language Arts classroom.

To that end, I used a microethnographic approach in order to generate a data archive to respond to my first research question about what happens when multimodality gets explored by students and the teacher. This study focused on four adolescents in a tenth-grade World Literature and Composition course across a two-week period during a *Lord of the Flies* Synthesis Writing unit. The unit represented my efforts at meeting local and state academic expectations while implementing a multimodal engagement of a canonical Western text. Having already planned the unit, I distributed sixty-page packets containing all relevant space for taking notes, creating illus-

trations, annotating texts, and additional curricula ranging from sociological, historical, governmental, and psychological articles. The goal was to move beyond a dated traditional plot-based, thematic exploration of Golding's classic – a practice that remained among others in my department – towards a more engaging understanding of human nature in extreme situations. A subsequent goal was to connect the students with the curriculum through a transactional approach instead of one based upon relatively passive transmission of information.

The second research question related to what Denise Newfield (2014) identified as the transmodal moment. With this theory, modal shifts are recognized as punctuations across semiotic meaning-making chains. Since they are external, e.g. observable, moments of meaning making, they can be described and interpreted. In addition to video and audio recording, relevant student work was digitized for triangulation, observational notes were created then expanded, and three salient meaning-making events were identified from the preliminary viewings. Afterwards, transcriptions were generated from these three events in order to explore through ATLAS.ti and construct results.

This chapter presents what I've come to understand through my close analysis of the study by ultimately responding to the two research questions. My response used evidence from across the data archive and relevant literature. Additionally, constructed narratives and figures from the data helped in responding to the research questions. First, I provide the context in which the microethnographic study took place, including a rationale for the unit in the broader context of the tenth-grade curriculum. Within this unit, three meaning-making events were selected according to a flexible approach. Because this study was inquiry-based and exploratory, there were no preset criteria; only after analyzing the data did I select three events from the two-week period of the study.

Next, I provide my analysis of those events in order to answer my research questions. I decided to use narrative and graphic reconstructions of the three events and analyses of what I saw along with an interpretation of what I didn't see. The reason I did this was to greater explore the possibilities and missing parts within a multiliteracies pedagogy. After the three reconstructed events and analyses, the two questions are responded to and, using excerpts and figures from across the three events, I discuss the overall results, unanticipated occurrences, adaptability, and limitations.

Curricular Decisions and a Rationale for Event Selection

To start, several contexts better explain the dynamics, personalities, and modal predilections within the group. The semester-long tenth grade World Literature and Composition class I studied featured twenty-one students and a paraprofessional who served the specific learning needs of an individual student. I operated as an observant participant, teaching the lessons and recording the generated data. Fifteen students and the paraprofessional volunteered, while six students declined to participate. Out of those who volunteered, four were selected – Nimer, Brittany, Tucker, and Johannes – based upon diversity in race, ethnicity, gender, perceived literacy ability, classroom participation, and academic achievement across the semester.

My goal in recruiting a variety of participants reflected my need to have a sampling of different backgrounds; while all students carry different experiences – even those from more heterogeneous backgrounds – experiences inform meaning-making. This diverse representation of various backgrounds, interests, academic abilities, and genders better ensures different perspectives and modal propensities across the data archive. For a more detailed look at my participants, Chapter Four shared a lengthier description of these student participants. With these four participants, I shared three significant meaning-making events. However, what is the broader context in

which these events were identified? Furthermore, why did I make the curricular decisions I made? Finally, what criteria was used to select these events? The following section responds directly to these questions.

Broader Context

As I mentioned previously, the overall goal for the tenth-grade curriculum was to shift from what I believe to be is a dated approach to English Language Arts. Plot-based quizzes and tests that ask students to regurgitate the theme of novel, as if there is one lesson to be learned, do not adequately prepare students for the communicative possibilities and social futures (New London Group, 1996) of tomorrow. Furthermore, this traditional approach privileges the texts over the students' responses to the texts.

In particular, the unit focused on the modal possibilities of learning, while still meeting the goal – synthesis writing – of my department. Therefore, in reading *Lord of the Flies*, I sought to explore the psychology of good and evil, the willingness and reluctance to authority, and, using the novel as an anchor, the potentially destructive nature of humanity. Through a variety of articles, films, video lectures, and role-playing, the unit was designed for engagement and multimodal exploration. Next, I share what curricular decisions and content preceded this unit to provide a broader context.

The context within the semester. As a new curriculum, our class studied culture through a variety of multimodal texts across the Fall 2017 semester: films, TED talks, paintings, historical photographs, poetry, plays, and monologues. Rather than study English Language Arts through traditional approaches like one text per unit, we transacted with a variety of texts through identifying our familial, neighborhood, school, city, state, national, and other – gender,

religious, ethnic – identities. We unpacked voice through a study of diction, style, tone, and syntax using the aforementioned genres of text.

Culture became a grounding point and the students continually revised their definitions of this concept throughout the semester. For assessments, students responded in a variety of modes: traditional academic writing such as literary analysis, synthesis writing, and more creative compositions were constructed. Similarly, we also created visual representations through physical products, like drawings, and digital reactions, through Google Slide presentations and computerassisted visuals. This non-traditional approach required a variety of texts across different modes.

Why Lord of the Flies? Throughout the semester, films like *Bend It Like Beckham* (2002) helped us see the tensions that arise between traditional and modern cultures, generational conflicts, and gender issues. As a continuation of conflict as a concept, *Lord of the Flies* functioned to show how conflict can break down the traditional norms of cultures, civilization, and order into chaos. While *Lord of the Flies* is a canonical text, written in English and representative of the dominant Discourse, I selected it as a centerpiece to my microethnography of multimodal moments in English Language Arts classrooms for a number of reasons.

First, the text meshed well with the overall tenth grade curriculum we were developing. For more context, our department had already redeveloped all but the tenth-grade approach to English Language Arts. Our ninth, eleventh, and twelfth grade curricula shifted towards more active transactional reading in addition to more relevant texts to the students we teach. My department head wanted to see tenth-grade similarly change and become more pedagogically contemporary.

Second, our school had limited numbers of class novel sets, a reality many schools face. Searching through the bookroom, I saw in *Lord of the Flies* both a full class set of novels and the

chance to connect to previous units completed. Additionally, this novel appears on the reading lists of many English classrooms in the United States. For my study, I felt this text would particularly lend itself to multimodal meaning-making; on one hand, the plot is basic and easy to understand. Although I do not agree with numerical assessments of texts, as they don't account for the complex topics and themes, *Lord of the Flies* has a measured Lexile score of 770 (Metametrics, 2018). So, on the other hand, informed by my experience teaching the novel in the past, the depth of human emotions, the underlying psychological connotations, and the literary devices – such as symbolism and diction – strongly evoke complex responses. With strong emotional, logical, and ethical responses come visceral reactions and interpretations. Simply put, the text is engaging. But I cannot assume reader familiarity with the text. In the next section, I share a basic overview of the novel.

The basic plot and some themes. The novel concerns the impact of nuclear war and the crash landing of a group of British school boys on an island. What follows is a conflict between the boys attempting to preserve order and civilization measured against the pursuit of self-interested pleasure through hunting and raiding of other boys. Several protagonists seek food, shelter, and attempt to establish order through a hierarchy. Additionally, rescue is a priority for them. In contrast, the antagonists hunt on their whims, reenact their hunt through violent dancing, allow the fire to get out of control, steal, and – ultimately – murder several children.

In terms of subjects, the novel explores order, chaos, civilization, humanity, fear, good, evil, and the struggle to survive. It shares the complex facets of community, masculinity, physical conflict, duty, perceived laws, and religion. Since many of these topics are central to the human experience, they provide ample opportunities for student engagement, exploration, and reac-

tions. Many of these subjects loaned themselves readily for connections to other texts and thematic explorations. Again, although deceptively simple, the text functioned in the context of my study as a springboard for exploring the human experience, especially with vibrant and complex reactions across the modal spectrum.

Specific dates. Starting on October 16, 2017, I speculated that the unit would pair well with TED Talks and articles about human psychology and famous studies relating to conformity (Milgram, 1963), prisoner and guard behavior (Haney, Banks, & Zimbardo, 1971), and competition versus cooperation (Sherif, 1954). Although the unit ended on November 17, the data collection occurred from October 18 to November 2. From this nearly two-week period of time, I selected three events for analysis. The next section describes the criteria for choosing those three events.

Rationale for Event Selection

In order to better respond to my research questions, I selected three events featuring salient and overt use of multiple modes. While I have argued that all communication is multimodal, these particular episodes featured the characteristics outlined in my theoretical framework. These characteristics became my hindsight criteria for the three events. The meaning-making represented, again reflecting the characteristics in my theoretical framework, was *social*, *transactional*, *vivid*, *active*, and – at times – *personal*.

I looked for events that, because of their brevity, were rich in possibility. Another way to say this is that I wanted events featuring life, energy, and meaning-making possibilities that were temporally concise. The reason I chose such small events reflects my microethnographic approach to studying transmodal moments. I feel the organic nature of utterances and responses

were represented in these three events. As such, the events allowed me to explore initial impressions of multimodality in process, test out my thought processes on meaning under construction, and repeatedly evaluate interpretations of how the modes used contributed to my participants' learning processes. The following section explores the formal reconstruction of these three events preceded by a brief summary of what occurred.

The Three Events

This section starts with a brief overview of each event, particularly focusing on how each fit into the overall unit. As the more in-depth analysis progresses, more details provide a greater context. Additionally, my analysis of each event follows. Finally, this section anticipates another which responds to my research questions using significant actions, utterances, and analyses from the three events.

These three events represent salient meaning-making experiences that transpired across the two-week period of data generation. The next section of this chapter presents these events, through context, narrative description, visual interpretation through graphs, and constructed transmodal schematic outlines. The italicized stories provided move the research forward in order to help illuminate what I saw in person and across the data archive. They are written up as such in order to best answer my research questions. As I go through the rest of the chapter, I unpack the three events – "Hypothetical Reactions to a Desert Island," "Perceptions of the Group: Tucker's Controlling Girlfriend," and "Brittany and Tucker: Palisades for Protection" – more closely.

Hypothetical Reactions to a Desert Island

The first event occurred on Wednesday, October 18. This was the second day of the unit devoted to our exploration of *The Lord of the Flies*. The previous day explored the historical

context of the novel in addition to biographical details of William Golding. However, on this day, my focus for the lesson was to introduce students to the exposition of the novel using Peter Brook's (1963) film introduction. Combining music, sounds effects, and still images, the film provides the major plot details including the evacuation of England, the boys on the plane, and their eventual crash on a deserted island. I felt it was important to engage the students through visual and auditory modes because the first chapter, in past experiences, can be a dry *read*. Instead, my students *saw* a traditional British school facade, *heard* a choir at practice, *viewed* the fictional evacuation, *felt* a launch of missiles, and *witnessed* the eventual plane crash preceding the arrival on the narrative's island.

Students were organized into groups in order to share notes, impressions of the film's introduction, and respond to several questions based upon the imagery and sound effects. I shifted towards my participants during an organic discussion that followed, while other students in the class were finishing their assignment.

Arranged in a semicircle to the right of the projected film, Johannes, Tucker, Nimer, and Brittany – sitting habitually in their desks in this order, from left to right – took notes on the progression of images and sounds while viewing. Although writing, they additionally engaged with the film through multiple modes: sight, sound, and page layout. After viewing the Brook's (1963) film and taking notes, they had a small group discussion on their findings, followed by a full-class debriefing. For the four participants, this activity led to a spontaneous discussion of how the students would react if they were on an island. This was unplanned, but serendipitous and illustrative of what can happen when audiovisual modes, like my selection to use the film's introduction, get used. In other words, a traditional static reading of the text would not likely spawn the significant organic discussion which grew to become my first event for analysis.

As an observant participant, I went from group to group gauging their reactions to the day's anticipatory activity. However, at the 62:38 mark of the class, I arrived to engage and assess where the study's participants were. The following narrative shares a 115-second interaction regarding what they would do in this situation.

Arriving at the participants' group, I sat atop a desk facing the four, listened, and engaged in interaction. Brittany looked at the floor, avoiding eye contact, and shared, "I couldn't handle being on the island." Having known Brittany for a number of weeks, I attributed this to her shyness. Similarly, Nimer shared, "I couldn't handle going through war." At this point, Tucker chimed in.

Throwing his hands in the air, Tucker established eye contact with me and shouted, "I think it would be fun!"

I turned to look at him and asked, "Why?"

"I don't know why," he replied.

My next response had several objectives: to validate his opinion, reward his physical excitement in class, and extend the conversation to others in the group. "And that's what I'm interested in, is how our opinions differ – it's like, 'No, I do not want to do that. I could not handle that,' versus, like, 'Yeah!''' I said as I threw my arms in the air, mimicking Tucker. Wanting to continue this line of role-play, I asked, "So, now you're on an island and what are your resources?"

Nimer lifted her hand and only uttered an "Um," before Tucker interjected, smoothing his hand out, gesturing a plane's wing, "I mean, you've got the plane, you could probably make a raft out of it."

"Food," offered Nimer. She gazed at Tucker, since he overlapped her speech.

"If anything," said Tucker with a pause, "you could start making an axe and build a raft out of the plane." Tucker raised his left hand, mimicking a chopping motion as he spoke.

"Or, like, you'd have to find a spot where no one goes and, like, a place to make a hideout," Nimer added while asynchronously moving her fingers, spider-like, emphasizing the secrecy of the word "hideout." I was happy to observe continued evidence of multimodality through gesture and speech.

I shared, "So, y'all already have kind of the same ideas as to what you do on an island?" Tucker, excited at having figured out the setting of the novel based upon my pleased reaction, pointed at me and exclaimed, "So, we're living on an island!"

Looking at Johannes and trying to elicit a response from a hitherto quiet participant, I asked, "What would you do, like, something similar?"

Johannes extended his left hand, palm down, anticipating what he would soon share: "I mean, just go with the flow." Johannes laughed.

Overlapping the end of his utterance, Nimer bursted out and arranged her right hand into a chord shape, "He'd have his guitar."

Johannes stretched out, took up more space, closed his eyes, and started strumming with his right hand and shifted imaginary chords with his left hand. Repeating Nimer, he modified, "I'd have a guitar playing — life is great!"

Several key multimodal moments occurred within the frame of this first segment. Throughout my analysis of this event, I'll refer to Figure 5, a graphical reconstruction of the dominant modes employed by my four participants as they occurred across the identified event.

The first significant multimodal moment marked the beginning of my timeline. I overheard Brittany's utterance of fear, saw her shift in gaze, away from the group, and a gesture to cover her eyes. I interpreted this as a shy and fearful reaction to the isolation and uncertainty Brittany imagined facing on the island. This sentiment was shared by Nimer when, within five seconds, she reacted, adding, "I couldn't handle going through war." I see this as a shift along the semiotic chain of meaning making. Although it is not contained within my selected event, Brook's (1963) film provided the first transmodal moment, combining visuals, audio, and an interpretation of Golding's (1954) novel.

Significantly, this exchange between Brittany and Nimer marks the first significant punctuation of meaning-making. Brittany reacts through three identifiable modes – speech, gaze, and gesture (see Figure 5) – and Nimer, similarly, reacts. However, her interpretation involves war, in general. Rather than focusing on the isolation of the island like Brittany, Nimer added to the meaning-making process with a shift in modes and the addition of a different topic – survival on an island would be difficult, whereas surviving a warzone would present different challenges. Nimer's use of multiple modes – speech, gaze, and her shift in body posture towards Brittany as a speaker – demonstrated her engagement with the meaning-making process. While it may sound obvious, this visible engagement was useful for me; I could tell that Nimer was focused, involved, and engaged in the conversation. In other words, the lesson – at least for ten seconds – was successful. However, what wasn't noticeable in person were Tucker and Johannes's responses.

Through analyzing the video, I could see Tucker and Johannes's shifts in gaze and body position. They followed the verbal utterances of Nimer and Brittany through eye contact. Although a basic part of communication, I specifically point this out that engagement wasn't assessed through their written or spoken words. Instead, I could tell that, through the multiple

modes employed during these two brief punctuations along the semiotic chain, Tucker and Johannes were following the conversation. This becomes more apparent when Tucker chimed in.

The act of combining an especially observable physical reaction, e.g. tossing both arms and hands in the air as if on a roller coaster, demonstrated the nature of Tucker's hypothetical response. Happily exclaiming, "I think it would be fun!" Tucker's excitement was palpable. This multimodal moment had Tucker using speech, a playful gaze of joy, arms gestured in the air, and a shift in body posture that almost saw Tucker out of his chair. Throughout the semester, I had observed Tucker's sluggishness in more traditionally challenging tasks such as analytical writing, silent close reads, or individual annotations of texts. This reaction to Brittany and Nimer's similar utterances stood in stark contrast.

In doing so, I saw how the type of activity – or, at the least, providing space for a reaction like this – proved to be more engaging for Tucker than traditional approaches like reading and writing print-based texts. What I cannot account for, however, is whether it was my selection of a multimodal text, the film, sparked this engagement directly or if his engagement was an indirect result.

Perhaps he wanted to impress the girls with his fearless attitude. Although I didn't identify this during the moment – my participants and I are only fifteen seconds into my first selected event – I prodded Tucker for an explanation. Standing in front of the group and shifting my gaze from the girls, I asked, "Why?" Tucker couldn't explain his exuberance for being placed in this hypothetical situation: "I don't know why," was his reply. With this lingering around the twenty second mark, I wanted to validate his opinion, reward his excited reaction, and try to bring in the other participants into the conversation. Had I more wherewithal, I might have directed my attention to Johannes, who had been vocally silent up, but continued to shift his gaze towards the speaker, until this point.

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Shifts in Body														Т				Т						
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Time	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115

Figure 5. Dominant modes used in conjunction during "Hypothetical reactions to a deserted island." This figure explores four salient modes used during the meaning-making event; each participant has had their name reduced to initials and the time is measured in seconds.

After filling up around twenty-five seconds with my thoughts, validating Tucker, and working up to asking a question, I began fishing for another response. I asked, "So, now you're

on an island and what are your resources?" Nimer used gesture, gaze, and vocalized a near-statement and was interrupted by Tucker. Tucker's interruption – "I mean, you've got the plane. You could probably make a raft out of it" – and overlapping of Nimer at the fifty-second mark demonstrated the creative thought process that he was employing. Although it could be interpreted as socially rude, he shifted the conversation towards one of my major goals: bringing students into the text through a form of role-play. In other words, he put himself into the story.

Using shifts in posture, gaze, speech, and gesture, Tucker mimicked a chopping motion suggesting that an axe be made, without elaborating how or with what materials, and a raft out of the plane's wreckage. Although the novel would share that the plane disappeared, we hadn't even started reading. Yet again, Tucker's use of multiple modes and vibrant physical reaction represented engagement in the learning process. At the time, I could tell he was visibly engaged. This engagement and excitement shifted Nimer's earlier fright towards her ideas at coping or, possibly, survival. From seconds seventy to eighty, Nimer started to use more gesture, emphasizing the secrecy of finding a "hideout" on the island for security. I see Nimer's increased use of physical modes as an extension of Tucker's movement and my reaction: I did my best to mimic his excitement and verbally reward his enthusiasm.

Around the eighty-five-second mark, Tucker figured out the setting of the novel. While others may have gathered this from the introduction to the film – it did feature a still image of the beach at the end – I didn't want to insult his reaction. Pointing at me, smiling, and loudly sharing his realization, "[We're] living on an island," I wanted to reward his enthusiasm. However, I noticed that Johannes had yet to share his impression of the situation. As Figure 5 shows around this time stamp, he was paying attention through shifts in gaze and posture but failed to contribute vocally or gesturally. So, I addressed him directly with my line of questioning, eye contact, and shift in body posture towards his direction.

Around the ninety-five-second mark, Johannes shared, through a gesture – his hand mimicking a wave or breeze – and speech, that he would "just go with the flow." He followed this with a laugh. Although this study was about modes beyond those traditionally assessed, I felt the need to hear what Johannes had been thinking. In other words, what would *he* do? Nimer helped fill in the blank, demonstrating her personal knowledge of Johannes's hobbies: "He'd have his guitar." I next bring attention to the fact that she continued to use gesture, holding her hand into a chord shape.

I interpret this as further inspiration. Just as Tucker's physical gestures evoked a similar reaction from Nimer, Nimer's identification of Johannes's musical proclivities inspired a physical and verbal response. The chain of semiotic meaning continued: Johannes modified her utterance and added to the conversation. "I'd have a guitar, playing," he shared, "life is great!" As he said this, he smiled, closed his eyes, and strummed an imaginary guitar. Unlike Nimer who merely held an imaginary chord, Johannes fully imagined an instrument in his hands, complete with strumming and chord changes.

Unfortunately, upon closer analysis, I noticed my lack of engagement with Brittany. Although she started this particular event, aside from her initial utterance, her engagement was limited to shifts in gaze and posture. Figure 5 represents the few times she almost verbally shared an utterance but was drowned out by more dominant personalities. This demonstrates an obvious point as a teacher: I failed to provide the chance for Brittany to verbally contribute to the meaning-making process within this group. I didn't cull forth her opinion or politely silence the others

in her group. While she spoke more prior to and after this event, her missing voice and unspoken opinions are lost opportunities. However, there were some positive results from my analysis.

Although this first event lasted one-hundred-and-fifteen-seconds, it helped me identify several strengths in observing multimodal responses within the classroom. I saw engagement through typically assessed modes: gaze, gesture, speech, and shifts in body posture. I reacted to students in a positive manner and reinforced their multimodal responses. By starting the day with a film analysis, rather than reading the first chapter, I believe that I had increased engagement with both my participants and the class as a whole. Additionally, upon a closer scrutiny through audiovisual analysis, I could see the transactions across student utterances as punctuations in the semiotic chain.

Naturally, these transactions loan themselves towards the transmodal moments which Newfield (2014) theorized. Again, the transmodal moment is a meaning-making punctuation that a researcher identifies as meaningful along the semiotic chain. While this unit is flexible – one could talk about a lecture as one moment leading to an artistic response as another – I have used a finer gradation to identify specific transmodal moments within this first event. As a supplemental form of analysis, I followed Newfield's (2014) schematic outline to reconstruct the event from another perspective (See Figure 6).

In constructing transmodal schematics, I identified how meaning-making travels along the semiotic chain. I wanted to see how meaning could shift across modes. Although I include information outside of the event, I assert that these transmodal moments are pertinent to the overall meaning being made. Furthermore, it provides a supplemental glimpse to my narrative and graphic constructions.

• Text A: Peter Brook's (1963) Lord of the Flies

The film's introduction played. Still images fade into each other as speech, music, and Foley art – sound design – is heard. This was displayed from a computer onto a large dry erase board.

[Transmodal moment]

• Text B: Student generated notes in response to the film clip All students in the class took notes on the images they saw and sounds they heard. These were written in the unit packet, responding to questions provided.

[Transmodal moment]

• Text C: Small group discussion

In groups of four, students discussed their reactions based upon their notes. Questions on a Google Slide presentation were displayed on the whiteboard to facilitate discussion.

[Transmodal moment]

• Text D: Event 1. Hypothetical reactions to a desert island

As the preceding section highlighted, the conversation specifically shifted towards one of imagined reactions and interpretations of desert island existence. Although my participation helped to shift the conversation, the use of gaze, gesture, and vocalizations shared the unique reactions of the participants. Both of the girls, Nimer and Brittany, feared for safety.

[Transmodal moment]

• Text E: Tucker's exclamation

Tucker specifically threw his hands into the air and welcomed the adventure, stating "I'd have fun!" His use of gaze, gesture, body posture, and speech were specifically made in reaction to the images and sounds from Text A, his written reactions and in Text B, and the reactions of Nimer and Brittany. While similar in modes - gesture, gaze, and vocalizations - to Nimer and Brittany, it was the change in mood that signified a major shift in the meaning being made. Rather than fearing the potential conflicts on the island, Tucker welcomed the adventure with literal open arms. Tucker later used his hands to signify using an axe, supplemented with speaking, "If anything, you could start making an axe."

[Transmodal moment]

• Text D: Nimer and Johannes's reaction

Having shifted the mood towards adventure, I tried to engage a student who had not shared. By engaging with Johannes through speech, I elicited a reaction from Nimer. Her gestural mimicking of a guitar, and her knowledge of Johannes as a musician, resulted in Johanne's transformation from unengaged to a hypothetical therapeutic outlet on the island. Although he used similar modes of expression like Tucker, he constructed an utterance establishing a very different mood, in his words a "just go with the flow" approach to survival on an island.
Figure 6. Schematic outline of "Hypothetical reactions to a deserted island." Using Newfield's (2014) conventions for presenting a schematic outline, this figure reconstructs the event in terms of texts and transmodal moments.

Following Newfield's (2014) reconstruction of transmodal moments through a similar schematic, I reflected on the significance of studying the seemingly invisible exchanges during class and how they lead towards meaning making. In this first event, my analysis helped me gain an understanding of multimodality in a new light: lines of questioning that brought my participants into the curricula as themselves, rather than analyzing characters, led us to a conversation about survival. This conversation not only gave me a preliminary idea about their knowledge of wilderness survival, useful later during activities, it also helped me to understand the impact that modes have on expression. Another way to say this is that by identifying transmodal moments, I could freeze and fix meaning-making moments in time to both inform future instructional decisions and see the learning "moves" my students and I made during a particular event in a particular lar lesson.

In this first event, gaze, gesture, and vocalizations were taken up and used differently by each participant. However, they could be used to inspire others in reacting similarly. Tucker's physical gestures and body posturing impacted Nimer's. Nimer mimicking a guitar and her knowledge of Johannes's musicality influenced Johannes's response. Some of this influence was, in part, through my praise of multimodality in situ. Herein I discovered a major application of studying transmodal moments in the classroom: they can become landmarks for future meaningmaking, linking modes across linear class-time in varying gradations of time, space, and modalities.

But a limitation exists in my identification of transmodal moments throughout the chain of meaning-making. The transmodal moments were specifically ones I selected out of the innumerable ones happening within the classroom during this particular day's data generation. Students talked during the film. Some asked me to pause and answer questions about the images. Others looked up historical information on their phones during instruction; others were on social networking apps and, therefore, disengaged from the curriculum at hand. So, what does this mean?

My point is that the selection of transmodal moments, like much of qualitative data analysis, is an inherently subjective enterprise. This may be obvious to some. However, I had to notice the moments in order to evaluate and later use them. In choosing my particular moments, I highlight the significance of recognizing – during particular multimodal meaning-making moments – how my pedagogy informed lesson design, instruction, reaction to student utterances, and successful student engagement.

Specifically, within this event, the meaning travelled along the semiotic chain from an opening activity analyzing film to a hypothetical event of survival using available objects. This meaning-making then to physical and verbal reactions. Because this role-playing was organic, the multimodality displayed was fresh and novel. Had this been an activity with questions on a worksheet, the written word would have been the primary evidence of meaning and my assessment would have been both in the moment. My formal assessment or numerical grading of student knowledge and skills would have been primarily through their writing. My feedback would have also been through the written word. Instead of privileging one mode, the unique reactions of each participant became later points of reference throughout the unit.

The second event similarly focused on our construction of meaning based upon a prompt. Yet, through this second event, we constructed a conversation around stereotypes and expectations in relationships. What follows next is the narrative retelling of the second event, my interpretations supplemented with the graphic chart of participant modalities, and my constructed transmodal schematic outline detailing the chain of semiosis.

Perceptions of the Group: "Tucker's Controlling Girlfriend"

The second event transpired on Friday, October 27. My goal for the day's lesson was to explore how societies break down. Assessment-wise, we would complete another synthesis paragraph tying together how order broke down in the novel, as the boys on the island descended into chaos, and how historical utopias have failed. Often considered a Dystopian novel, I deemed a study of failed human settlements important. Although the day's lesson also featured a film on ten failed utopias in history, including a variety of reasons why they fail, it was the opening activity that provided a fifty-five second multimodal event for analysis.

I specifically chose this second event because it connects the personal and subjective nature of English Language Arts with a unique multimodal use of gaze, gesture, posture, and speech. To better unpack how this event unfolded, Figure 8 visually represents the four participants and the modes used in conjunction across a fifty-five second timeline.

For more context, the class sat in their groups and the four participants arranged themselves again in their customary places; from left to right sat Johannes, Tucker, Nimer, and Brittany. Opening with a Fast Five, wherein students write as much as they can during five-minutes, I projected a Google Slide presentation on the board. With a YouTube video featuring a countdown timer, students generated a list of responses to the question, "What are the ways in which things break down?" After the timer, the groups had individual discussions preceding a group

discussion. My goal for the discussion involved three scaffolds: individual, small group, and whole group responses. Yet, it was at approximately the 9:20 mark in the class in which the following occurred.

"Everyone thinks that they have control over the person that they're with," she stated, gesturing with her hand outwards, palm up, and fingers flicking. "With," she paused, "like?" Nimer looked over to her right at Tucker for permission to continue the line of conversation. "Tucker's girlfriend?" she finished.

Tucker had been staring forward, slouching in his desk. Although he never made direct eye contact by turning his head, in his periphery, he assented with a subtle nod. Tucker merely spoke, "Yeah?"

I sarcastically inserted, "Wow, that's surprising."

This elicited laughs, but also brought in Tucker's gaze. Looking at me, with a smile, he feigned being upset with a drop of his jaw and a shift towards an angry expression. Brittany and Nimer giggled while Johannes remained mostly quiet.

"Tucker's girlfriend," Nimer began as she tossed up her right hand as if offering up a suggestion, "probably doesn't like him being with other girls."

Brittany placed her head on her right hand, beneath her chin, and anticipated a response from Tucker.

"Probably not," he shared.

Brittany's eyes opened brightly in response and resumed hanging her head in her hand. Nimer stated, "So, she's, like, trying to take control over him."

"Which is problematic, 'cause that's a trust issue," I interjected, "and she should trust him – unless she has a reason not to."

"I don't know," Tucker said.

"He cheats a lot," Johannes declared with a deadpan delivery.

Nimer laughed. Brittany covered her eyes in embarrassment or shyness as she, too, laughed. The girls exchanged glances with each other.

Looking at Johannes with a smile, Tucker responded, "Totally." Johannes returned the smile and – satisfied with his joke, its delivery, and reception – crossed his arms.

Although brief, across this fifty-five-second event, key multimodal moments occurred. The first of these takes place when Nimer made a verbal generalization about control in relationships. Using gesture to emphasize her point, she turned her hand outwards, palm up, and seemed to be culling forth something by repeatedly flicking her fingers. As she continued to speak, I realized that she was drumming up the courage to bring Tucker's personal life into the conversation. Nimer had asserted, "Everyone thinks that they have control over the person... they're with." But she paused, glanced to her right, and asked, "Like... Tucker's girlfriend?"

At the five-second mark, Tucker did something communicatively curious. Nimer's cue was not "monomodal," but was expressed through verbal and nonverbal modes (Jewitt, 2011, p. 4). Without looking at her, he offered an inflected, "Yeah?" granting permission for this line of inquiry. As a facilitator of dialogue in the classroom and well aware of the potential tension, I diffused the situation with humor. "Wow, that's surprising," I inserted with sarcasm. My goal was not to interrupt the meaning making efforts, but ensure a lightness remained in a potentially sensitive dialogue. At the ten-second mark, Tucker combined a number of modes which reassured me that humor was the right path. While humor is not a mode, but a quality that can be at-

tached to modes – gestures, gazes, and vocalizations – the thread that it wove through our conversation here helped us negotiate a potential pitfall topic: relationships and expectations within them.

Gesture			В									
					N		Ν					
Gaze Shift			В									
		Ν					Ν			Ν		
												J
			Т									Т
Shifts in Body			В									
	N	Ν			Ν							
											J	J
			Т									
Speech												
	N	Ν		Ν	Ν		Ν					
											J	
		Т				Т			Т			
Laugh			В									В
												N
												J
			Т									Т
Time	0	5	10	15	20	25	30	35	40	45	50	55

Figure 7. Dominant modes used in conjunction during "Perceptions of the group: 'Tucker's controlling girlfriend.'" This figure explores five salient modes used during the meaning-making event; each participant has had their name reduced to initials and the time is measured in seconds.

In reaction, Tucker shifted his gaze towards me, smiled, then dropped his jaw and pretended to be upset. In response, Brittany and Nimer laughed. Johannes remained quiet but shifted his gaze. This next multimodal moment reinforced another hunch of mine. With correct knowledge of my students and their personalities, I engaged in play to facilitate meaning-making. Worried that Nimer's accusation – which is what I thought at the time – might upset Tucker, I intervened using humor as diffusion. This also elicited engagement from Brittany and Nimer. Additionally, it invited Tucker to play the role of a submissive boyfriend.

From the fifteen to twenty-second mark, Nimer used speech – "Tucker's girlfriend probably doesn't like him being with other girls" – and other modes to continue her train of meaningmaking with Tucker's monosyllabic consent. Shifting her gaze between myself and Tucker, Nimer spoke while tossing up her right hand, offering up her assumption about Tucker's girlfriend. Simultaneously, Brittany used gesture, body shift, and silence to anticipate a response. Reflecting upon this situation, there were a number of communicative signals taking place.

After seeking permission through inflected voice, pause, implicit request to bring in personal information about Tucker's relationship, and affirmation, Nimer used gaze, gesture, and speech to contribute towards how relationships can break down. This met one of my goals for the day, anticipating how the competing wills of people can be at odds. Hypothetically, Tucker might want to have platonically spent time with other friends of the opposite gender. However, this may have upset his girlfriend. Nimer used multiple modes to contribute this concept. Brit-

tany, although verbally quiet, used body language and gesture in order to demonstrate her engagement. I believed she wanted to see this mild drama unfold as we learned more about Tucker, his girlfriend, and a generalized view of control in romantic relationships.

Twenty-five-seconds into the event, Tucker offered a verbal response: "Probably not." Simultaneously, Brittany and Nimer reacted. Brittany shifted her gaze towards Tucker, opened her eyes wide in anticipation, and Nimer stated, "So, she's, like, trying to take control over him." Once this was uttered, Brittany put her head in her hand. Although the primary conversation took place between Nimer and Tucker, Brittany was clearly engaged evidenced by her multimodal response.

I was enjoying the nature of the conversation – it was on topic – and I wanted to meaningfully contribute as a participant. I offered my opinion that this was problematic as a "trust issue" and generalized that there should be a level of mutual trust in relationships. However, I couldn't help but interject humor, which caught Johannes's attention. After I shared that "she" might have "a reason not to" trust him, Johannes didn't skip a beat.

At the fifty-second mark, Johannes shifted his body and jokingly shared that Tucker "cheats a lot." Picking up on my hanging joke, Johannes uttered a punchline with deadpan delivery. Although he was joking, his response elicited several simultaneous reactions at the fiftyfive-second mark. Nimer's gaze shifted and she laughed. Brittany met eyes with Nimer, then covered her eyes and shifted away, embarrassed at laughing. Johannes and Tucker met each other's eyes, smiled, and Tucker agreed, stating, "Totally." Johannes's satisfyingly crossed arms silently finalized the exchange as we constructed an idea about one of the major reason relationships, whether romantic, governmental, or societal, can break down.

My goal with the activity introduced a key facet of the novel. Again, the students were engaged in an opening activity about how relationships fall apart. This conversation could have been depressing. This particular activity, ultimately, anticipated the social entropy and distressing violence in *Lord of the Flies*. The cruelty, especially in the characters of the novel, could have been staggering. Yet our approach to heavy topics was countered by a lightness that manifested in more than speech. The lightness I attempted to include was successful due to sarcasm; the vehicle for this sarcasm was through multimodal expressions. Tucker's subtle nod for Nimer to continue was followed by his extended jaw, an exaggerated gaze, in response to my vocal jab. Johannes's insinuation further embedded humor into the meaning making exchange. Afterwards, the smiles by Tucker, Johannes, Brittany, Nimer, and myself led us to assume that – despite the nature of the conversation – we were psychologically and emotionally fine.

What I most appreciate about this event is the subtlety of modal propensities and what I believe they represented. Brittany remained characteristically shy, but through a careful scrutiny, I could tell she was engaged. Nimer was bold in content but used speech tentatively to assert her opinion about Tucker's relationship. Tucker, who had previously been staring off, was brought into the conversation by the personal content and my use of humor as an engagement strategy. This might have impacted Johannes's decision to respectfully insult Tucker and suggest that infidelity was a regular practice of his classmate's.

Additionally, noticing Tucker's assent to Nimer's line of thinking allowed me to glimpse a possible pitfall: sensitive topics in the classroom have to be weighed individually. Fecho and Botzakis (2007) noted the need for productive tension in the classroom so that it can lead towards possibilities, rather than traps. Had this instead become an argument about Tucker's life choices or his alleged complacency in a toxic relationship, the meaning made might not have

been one of the landmarks for our later exploration of *Lord of the Flies*. Although knowing the students, their lives, and their academic abilities, i.e. building relationships, should be a foundational part of a teacher's pedagogy, this practice may not be emphasized enough in particular classrooms. However, knowledge of students – including how they make meaning multimodally – helped to provide a gauge for a range of behaviors, including engagement, expression, and content knowledge.

However, this subtle exchange belies the complexities of several transmodal moments. In using Newfield's schematic outline for a second time (see Figure 8), I explore how meaningmaking shifts across modes. In developing this outline, as before, I used transmodal moments outside of the fifty-five-second event in order to create a "comparative examination of texts in a transmodal sequence," (Newfield, 2013, p. 104).

• Text A: Fast Five Prompt.

A projected Google Slide displays the questions to be explored: What are ways in which things break down? Consider: machines, people, groups, schools, governments, etc. An embedded YouTube video plays electronic music with a visualization pulsing behind a timer, counting down from five minutes.

[Transmodal moment]

• Text B: Student responses Collectively, students construct written responses to the questions in their unit packets.

[Transmodal moment]

• Text C: Student discussion Within groups of four, the class discusses their answers. Some students read off what they wrote; others take a more organic approach by responding to others in dialogue.

[Transmodal moment]

• Text D: Nimer's contribution

"Everyone thinks that they have control over the person that they're ((*gestures right hand outwards, flicking all fingers*)) with ((*pause*)) like ((*looks over to her right at Tucker for permission to continue the line of conversation*)) Tucker's girlfriend?"

[Transmodal moment]

• Text E: Tucker's response ((*Tucker stares forward, but sees Nimer's gaze in his periphery*)) "Yeah?"

[*Transmodal moment*]

• Text F: Landry's response ((sarcastically)) "Wow, that's surprising."

[Transmodal moment]

• Text G: Tucker's reaction Tucker pretends to be offended by dropping his jaw but smiles thereafter.

[Transmodal moment]

• Text H: Girls' reaction The girls laugh in response to Landry's joke.

[*Transmodal moment*]

Figure 8. Schematic outline of "Perceptions of the group: 'Tucker's controlling girlfriend.'" Using Newfield's (2014) conventions for presenting a schematic outline, this figure reconstructs the event in terms of texts and transmodal moments.

I selected the transmodal moments within this schematic that exemplify the significance of accompanying nonverbal modes and what they can add to a given classroom exchange. This is not to exclude the significance of verbal modes, like speech and laughter, but to highlight the significance of shifts in gesture, gaze, and body posture. Although I catalogued all shifts across the semiotic chain, the primary moments – Texts D through E – demonstrated how the nonverbal and reaction by Tucker acquiesced Nimer's line of expression. Within this exchange, "movement between and across modes" contributed towards how "meaning" was made (Newfield, 2014, pp. 102-103). For the students, engagement was not dictated by the common indicators: eye contact,

gaze, and gesture. Instead, the subtleties of nonverbal communication contributed towards the facilitation of the exchange.

Newfield (2014) called this occurrence in the "communicational landscape" a "synaesthetic [sic] semiotic activity" (p. 103). Within these modes, Nimer and Tucker's negotiation signaled that his private life was on the table and fair game for supporting evidence in the discussion of the topic. Nimer's inclusion of the personal provided an opportunity for the injection of humor into the situation. Across an academic period, ongoing relationship building is critical for creating a safe space where students can test ideas. Here, Nimer tested bringing in information that could have created unproductive tension within the group dynamic.

As their teacher, I also tested whether or not this was too close for comfort with Tucker by making a sarcastic comment about role within a relationship. Herein, the "Janus-faced nature of the transmodal moment" requires a method of analysis "in which an eye is kept on both the *prior* texts and the *subsequent* transmodalisations" (emphasis in original, Newfield, 2014, p. 104). While participating in the meaning-making event, I could not know how a conversation would go. Upon analyzing the event, luckily, both Nimer, Tucker, and I negotiated an exchange through verbal and nonverbal modes that allowed the creation of a landmark for our study of the novel.

In my first event, I highlighted the importance of recognizing landmarks in class. These multimodal moments serve as time and space markers for meaning-making. My goal was to use them throughout the unit – and often the semester – in order to cull forth previous ideas, utterances, and significant parts of the curriculum. Landmarks, frames of reference, and making the content relatable aid in helping students construct content knowledge; these ideas link to Piaget's (1936) assimilation of knowledge as students translate incoming information into forms familiar

to them. Although, Piaget isn't part of my framework and I am not operating from a stage-based theoretical position, I assert that the concept of assimilation dovetails nicely with my idea of creating and maintaining references throughout a semester.

Significantly, I recognized this exchange as an opportunity to engage the "maze of semiotic decisions" being made so that humor, through the combination of speech, gesture, and gaze could form an "intervention" within the meaning-making processes (Newfield, 2014, p. 102). Whether or not Johannes realized this, he, too, contributed towards our creation of personal meaning in how relationships may break down. This particular event constructed in the classroom would be a later go-to when we, as a class and not just the small group, discussed power struggles throughout *Lord of the Flies*. The final event for analysis connectedly deals with issues of power through a mock-election activity based on the island in which students generated digitally multimodal presentations.

Brittany and Tucker: Palisades for Protection

The third event took place on Wednesday, November 1. Our class had been making headway throughout the novel and bridging connections with various psychological experiments and concepts. My goal was to see how the breakdowns – and reluctance to break down – in the novel reflected our own capacities for resilience and failure. On this particular day, however, my focus for the lesson was to bring together a few ideas, both literary and pedagogical. *Lord of the Flies* features competing groups of boys. Within each group is cooperation; without each group is deadly competition. Regardless, each group in the novel had a prominent leader.

In order to explore the complexity of this, I developed a lesson tapping into the class's competitive nature. They selected roles for themselves as they developed presentations using

Chromebooks to create Google Slides. These presentations shared a campaign for why one of their members would make an excellent leader.

On this day and the following, the students were tasked with an interactive challenge: each group of four took on different roles in order to co-create a digital presentation. This presentation would persuade the class to vote for a chosen leader to be in charge of a hypothetically deserted island. Each group selected roles for themselves through volunteering, challenges via Rock-Paper-Scissors, or number guessing. The six groups each received a set of directions with a twist: they had a secret. Some groups might have known where the pigs' trail was located, some had a knife, another might have known the location of a hide-out cave like Castle Rock in the novel, and a final group would have glasses, like Piggy's. The following day, student groups presented their digital creations. The whole class would vote on which leader would be elected; members voted for their own leader or for other groups'.

Interestingly, this final event for analysis took place the day prior to the presentations. In fact, it was during the creation. Nimer, Brittany, Tucker, and Johannes's group received the directions that gave them a secret: a knife. Armed with this knowledge, the four participants created a shared Google Slide presentation so they could each fulfill their roles: Candidate for Leader, Slogan Manager, Propaganda Maker, Secretary of Agriculture, Secretary of Strategic Defense, and Secretary of Getting Rescued. As an observant participant, I went from group to group to provide feedback and serve as a springboard for ideas. During an exchange with Brittany, I was able to connect earlier ideas – around the 11:50 mark in class – from Tucker. However, the following took place around the 39:14 mark in our class.

Brittany leaned on her hand and contemplated defending her leader, Nimer's, territory. "So, you said a couple pictures about the defense?" she asked me. Hunching over to provide more attention to Brittany and her Chromebook, I responded, "Yeah, what – what you might look up - uh - like a stockade or you might look up - uh - sometimes they're called palisades is a fancy word for it, so it's."

Overlapping my speech, Brittany offered a small response, "So, it's – uh?"

"When they're sharpened sticks in the ground that create a wall," I started to offer as Nimer interrupted.

"Why we're the best group?" asked Nimer, working on her own slide, separate from the conversation at hand.

"Yeah?" I shared.

Leaning against the wall with a lollipop in his mouth, Tucker offered, "Like, both ends sharpened?"

Brittany asked, "So, you said? What was the word you said? Shar-pay?" Brittany's face crinkled in a confused gaze at me.

"Fancy words," I said, "Palisades is one of them, I think. That's what they are." "Oh, great, I guess," replied Brittany.

I went over to her computer to view what she was researching. Looking at the images section of Google's search engine, she found some pictures.

"There you go. Yeah, there you go. Palisades showed up. I think that's what they are. Yeah, that's what I was thinking of. Those kinds of things. Does that kind of make sense?" I asked.

"Yeah," said Brittany, nodding.

"Okay, cool. And then, um, Tucker already pointed out to sharpen both sides of them," I shared as Tucker smiled, "which is kind of terrifying." Brittany smiled in response. "The idea of a stick with two sides," I started.

Tucker laughed and Brittany showed her work to Nimer, asking, "Is this okay?" for approval.

Before I analyze this final moment, there's a caveat. My analysis takes part in three movements. First, I share a significant contextual detail about an utterance by Tucker that plays heavily into this moment. Next, I share how Johannes was distracted during most of this moment. Finally, I use Newfield's schematic outline to reconstruct and analyze this event according to the transmodal moments I identified.

Although it occurred outside of my selected event, I first unpack Tucker's utterance in order to better explain the first multimodal moment from this particular event. As a teacher, I got lucky with Tucker's statement about a spear sharpened at both sides. In *Lord of the Flies*, this iconic tool is first used as a sacrifice for the Beastie, a nonexistent entity that the antagonist uses in order to manipulate power. This piece of propaganda is a violent and symbolic weapon: the doubly sharpened spear is stuck in the ground and a pig's head is placed atop the other end. Eventually, the antagonist orders a similar spear to be made for one of the protagonists. These events mark significant increases in violence in the novel. Tucker's statement about a spear, sharpened at both sides, served a number of functions.

First, Tucker's statement foreshadowed the sacrificial and violent plot events in the novel. In other words, this activity occurred prior to our reading. Additionally, it predicated a famous line that the antagonist states: "Sharpen a stick at both ends" (Golding, 1954, p. 136). In a

way, I was able to reward Tucker for his fortuitous foresight. Experienced readers make predictions and evaluate texts as they proceed to read them. Lastly, Tucker deserved recognition for this discovery. It may be obvious, but genuine praise goes a long way in the classroom.

Gesture	В																В	
				Т														
Gaze Shift	В	В					В	В				В					В	
		N	N		N				N								N	
	Т			Т					Т									
Shifts in Body	В			В			В			В		В					В	
																	N	
Speech	В	В					В	В									В	
					Ν												N	
				Т														
Chromebook use	В		В				В	В	В	В	В	В	В	В	В	В		В
	N			N		N	N	N	N	N	N	N	N	N	N	N		N
		Т	Т															
Cell Phone Use							J	J	J	J	J	J						
															Т	Т	Т	
Time	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85

Figure 9. Dominant modes used in conjunction during "Brittany and Tucker: Palisades for Protection" This figure explores six salient modes used during the meaning-making event; each participant has had their name reduced to initials and the time is measured in seconds.

Having explained the significance of this preceding utterance, I move on to share the final multimodal event itself. Spanning across eighty-five seconds (see Figure 9), Brittany's question for me frames the start. As she leaned on her hand, Brittany shifted her gaze towards me and asked, "So, you said a couple pictures about the defense?" From seconds five to ten, I bumbled over a response. First, I hunched down beside her with a view of what Google images she was searching. Forgetting my medieval strategies for defense, I confused the words "stockade" and "palisade." As I stumbled over my words, Brittany overlapped my speech at the ten-second mark to confirm what I had stated.

"So, it's – uh?" Brittany asked, gazing back at me and looking at her computer. I offered a response, attempting to share an idea. Tucker had mentioned sharpening sticks at both sides. I realized that these could be used to build a modular wall – partly for stationary defense but could be taken apart and used as offensive weapons. So, I started to state, "When they're sharpened sticks in the ground that create a wall," but was interrupted.

Working on her own slide, Nimer interrupted our conversation at the twenty-second mark. I responded. Tucker, at the fifteen-second mark, shifted his posture, placing his back against the fall. He removed a lollipop from his mouth and vocalized, "Like, both ends sharp-ened?" This statement reinforced what I hoped it would: in my earlier praise of Tucker's fore-shadowing of the phrase, he satisfyingly remembered the significance of his realization.

From seconds thirty to thirty-five, Brittany used speech to try and understand what I had said: "So, you said? What was the word you said? Shar-pay?" Her shift in gaze crinkled in confusion. I assumed that this gaze represented embarrassment at not knowing the word. Sensing this, I tried to assuage her concern, stating, "Fancy words. Palisades is one of them, I think. That's way they are."

"Oh, great, I guess," Brittany offered as she stared at her computer. Wishing to help her, I moved towards behind her desk to get a better view of her Chromebook screen. She selected an image and integrated it on the right side of her slide (see Figure 10). Herein lies a significant multimodal moment. While I had, unfortunately for this analysis, left her to work with others, the product she generated represents a significant use of multimodality. In this slide, I saw how Brittany was combining modes and ideas in a visual manner.



Figure 10. Brittany's slide for defense. In constructing a presentation for the class, Brittany provided a slide featuring how spears become palisades in order to protect shelters.

The slide from the presentation (Figure 10) demonstrated a modal shift from Tucker's and my speech towards visualization. Although she borrowed Creative Commons images to express meaning, our collective conversation led to meaning making that functioned in several instances. For their presentation, it demonstrated the resourcefulness of the group in a hypothetical situation. For our meaning-making of the novel, it represented a visual "fixing" (Kress & van Leeuwen, 2006) of knowledge-under-construction. For the exchange between Brittany and myself, it showed her assimilation of a new architectural concept. She included a visual of bi-directional arrow to demonstrate how the materials of the palisades wall could be dissembled into individual weapons, if defense of the group was needed. While activity was a thought experiment and a group challenge, I believed it would be a successful one.

While this multimodal exchange resulted in only one academically assessable product, the group presentation, the formative construction of that product required multimodal exchanges within each group. By circulating among the classroom and conducting exchanges with each group, I was able to see how students translated the directions into observable, external meaningmaking events through conversations, role-playing, gaze, and gesture. Although Shipka (2013) cautioned that there is a "tendency to equate 'multimodal' or 'multimodality' with digitized, screen-mediated texts," here students actually were translating meaning, embedded through multiple modes, from the prompt into interactions, and then towards a digital presentation (p. 74).

While this analysis has focused significantly on Tucker and Brittany, it was the generation of Figure 9, again constructed through audiovisual data, that granted me the chance to see how the participants did or did not engage with the task set before them. It showed who was working to construct meaning and who I should have better paid attention to. Specifically, the

cell phone use of Johannes from the thirty-second mark to the fifty-five second mark demonstrated a fairly regular practice of disengaging from the curriculum and task at hand. This occurred often during the unit and semester.

Brittany and Nimer spent most of the event working through their slides, asking questions, and eliciting feedback from each other and myself. Tucker was less engaged, but still paid attention to the work being completed. He also repeated his idea of the spears being sharpened on both ends, a key part of their tactics and of the novel to be read. Johannes was not engaged and spent the most time – out of his group – using his cell phone for music and social networking.

The construction of Figure 9 allowed me to account for student engagement and question: why is it that some students more readily approach tasks when others prefer to be disengaged? While I cannot generalize about the multitudinous reasons students would rather drift away during class time, I can share that Johannes regularly had turned towards his cell phone for escapism. Throughout the semester, I saw YouTube videos teaching bass guitar instruction and chatting applications open on his phone. I could also share that cell phones, digital games, and digital social lives are more engaging than school.

Interestingly, Tucker only checked his phone for approximately 15 seconds during this event. Neither of the girls were distracted by technology during this particularly event. The implications, evident through the constructed graphic, are to pay better attention at the lack of engagement and ensure that students use personal technology as a supplement for learning, rather than as a detractor.

For my final reconstruction, Figure 11 unpacks the most modally-loaded "transmodal chain" I identified throughout data generation phase of the study (Newfield, 2014, p. 108). This

figure starts with the preliminary punctuation on the meaning-making chain, the directions for

the project, and follows the meaning under construction until Brittany's final slides. These slides

serve as visual evidence of the multimodal meaning-making made.

• Text A: Print based directions for the project

Students were given one of six handouts. Each handout was identical in text, apart from the bolded text which emphasized a different secret tool or knowledge each group had. The text of the handout is below.

Teamwork on an Island

Situation The class is stuck on an island after a plane crash. There are a number of things you have access to.

What You Know

It is an island. There are sources of fresh water. There are trees. There are vines. There are pigs. There are birds. There is fruit.

There are a number of things you don't have access to.

What You Have and Don't

The plane's parts – and any modern conveniences – have all washed away during a storm. However, as far as technology goes, you have a few things. You have your clothes.

Your Group's Mission

 Each group is to determine roles: Candidate for Leader, Slogan Manager, Propaganda Maker, Secretary of Agriculture, Secretary of Strategic Defense, Secretary of Getting Rescued
Each role needs to contribute in some way to their group in order to get their leader elected.
After a workshop, you will have time to share why your leader is the best leader for survival.
Oh, there's a secret. Each group has something that the other groups do not.

Your group has the knife. You can use this for many purposes. Keep this a secret from the other groups.

[Transmodal moment]

• Text B: Student Chromebook work

Each student in the group worked on slides in a shared presentation. As the meaning-making progressed, they gave each other verbal feedback supplemented with gestures to construct a visual and textual presentation.

[Transmodal moment]

• Text C: Brittany's inquiry ((leaning on her hand)) "So you said a couple pictures about the defense?"

[Transmodal moment]

• Text D: Landry's response ((hunches over, leaning towards Brittany)) "Yeah, what - what you might look up - uh - like a stacked or you might look up - uh - sometimes they're called palisades is a fancy word for it."

[Transmodal moment]

• Text E: Brittany seeks clarity "So, you said, what was the word you said? ((asks with face crinkled in confused gaze at Landry)) You said sharp-pay?"

[Transmodal moment]

• Text F: Landry's response "Fancy words. Palisades is one of them, I think? That's what they are.

[Transmodal moment]

• Text G: Brittany's reaction "Oh, great, I guess." ((proceeds to use Google Images to find Creative Common pictures to include in her slide presentation))

[Transmodal moment]

• Text H: Brittany's slides (in order)

Brittany, whose real name was blocked in the first slide, created two slides for her group.





Figure 11. Schematic outline of "Brittany and Tucker: palisades for protection." Using Newfield's (2014) conventions for presenting a schematic outline, this figure reconstructs the event in terms of texts and transmodal moments.

Newfield (2014) stated, "semiosis is ceaseless and ongoing" (p. 101). Therefore, pinning down a particular meaning-making moment in a classroom can be difficult. It can start with the identification of an utterance but locating the initial stimuli might lead one down a rabbit hole.

Simple completion grades, multiple choice exams, and even submitted essays get assessed because they are static meaning-making representations that can be assessed, autopsylike. The work completed can represent the meaning made. However, Newfield's (2014) approach provided me a chance to see the punctuations on the semiotic chain. While I eventually freeze and create static assessments and conclusions out of the transmodal chains, the process requires a focus on the "prior texts and subsequent transmodalisations" (emphasis removed, p. 104).

Having presented descriptions, interpretations, constructions, and a specific representation of each key multimodal event, the next sections share several key results of the study. First, I share the overall patterns found across the events in addition to unexpected occurrences. Next, I share issues of trustworthiness throughout the analytical process. Finally, I share the limitations and the transferability of the results to broader populations.

Responses to the Research Questions

Having explored the three events in detail, the following section directly responds to my research questions. I drew upon the preceding results in this chapter to provide answers to the questions.

Multimodality: Implications of the Study for the Participants and Myself

For my first question, I asked: What happens when students construct meaning through multiple modes and what are the implications of studying a multimodal pedagogy for English Language Arts? Although my theoretical framework meant that across the four-hundred-twelve minutes and thirty-seven seconds of generated audiovisual data, every second could have arguably been replete with multimodal moments, my narrowing down the data to three moments through microethnography provided a significantly more focused response.

Across the three moments, I developed four main categories linking to how modalities were used, studied, and – drawing upon my own participation and experiences – can be understood. Therefore, my overall results divided into *engagement, awareness, interventional interruptions*, and *unanticipated results*. Like many ideas, there will be some crossover between the categories as they dovetail naturally throughout the meaning-making process in the secondary English Language Arts classroom. After unpacking each of these categories, I address the second research question.

Engagement. Taking place in many forms, engagement was the bedrock towards successful meaning-making during our two-week unit. The New London Group (1996) did not rally against shifts from print-based towards media-centric texts, instead they embraced the change

and suggested that literacy educators should adapt instruction towards a multiliteracies approach. Subsequently taking up this call, my goal to include multiple modes was simple: include as many – albeit intentionally according to appropriate design outcomes – as possible during instruction, learning activities, and student assessment. Although the lessons weren't all successes and engagement wasn't maintained for eighty-five minutes every day, that does not mean that I ignored the significance.

During instruction, I saw engagement through the inclusion of texts harnessing audiovisual modes like TED Talks, web lectures, explanatory films on different forms of government, and the Brook's (1963) film. Engagement was seen during the viewing of audiovisual texts and the activities that followed. Again, since this was a relatively new unit, I could compare it to past experiences. When the text was studied using primarily print-based activities, there was a pronounced lack of engagement. Fill-in-the-blank notes on biographical, historical, and thematic information in addition to traditional multiple choice reading quizzes and exams tended to decrease student investment.

Student engagement came through including a variety of learning activities spanning the gamut of modes. Role-playing, both spontaneous and planned, generate student interest. Two activities within this unit did so. One example had students select a leader and create Google Slide campaigns for leadership, for the most part, had students wondering what they would do on the deserted island. Another example, a collective viewing of the Brook's film introduction, was immediately followed by group predictions about the text. This organically led to the four participants placing themselves on the island and wondering what they would do. As a result of this conversation, my first event was selected. From this, I reached another conclusion.

Student engagement was maintained through validation and invocation. By validating student verbal and nonverbal responses, I was able to reward students with accolades thereby increasing their value of meaning-making within the class. Connectedly, if I later invoked these utterances, they would continue the semiotic meaning-making chain. Specifically, Tucker's arms in the air and exclamation of "I think it would be fun!" became a significant experience in describing how the characters in the novel reacted to their newfound freedom. Readers of the novel might remember Ralph's headstands and boyish excitement after the crash. This playfulness was echoed in other class members. In addition, Tucker's prediction of the spear sharpened on both ends became a future landmark.

However, I also kept track of how less-enthusiastic students reacted. Nimer and Brittany were immediately concerned for safety, like certain protagonists in the novel. As the plot progressed and became darker, we assessed whether there was space for the playfulness of Tucker or if the caution of Brittany and Nimer was warranted. Significantly, these outward signs of engagement became touchstones that we could later cull forth throughout our study of the novel.

However, engagement isn't always as exuberant. Throughout the data archive, Brittany was relatively non-verbal in her responses. However, I noticed that she was much engaged through body shifts, gestures – like covering her mouth to hide a laugh, shifts in expression – like a dropped jaw in mock surprise, and – simple to notice – her gaze would follow the current speaker or center of learning at the time. However, significant in this study, was when the non-verbal denoted a lack of engagement. Johannes's excessive cell phone use was prominent throughout the audiovisual data archive. In truth, most teachers don't have the opportunity to make these observations at such a detailed and sustained level. However, the study supports that

- when literacy educators pay more attention to observations like these - we can take advantage of engagement events, be they moments displaying or not displaying engagement.

Overall, identification of engagement came through awareness. The next section primarily focuses on the need to have what Kounin (1970) called "withitness."

Awareness. Kounin's (1970) term was created to denote the attention and subsequent actions that educators give towards their classroom. This involves paying attention, the use of proximity control, and being able to predict and diffuse situations before they occur. Although "withitness" primarily focuses on behavior, I use the term as it relates to the multimodal ways in which I responded to student meaning-making and engagement.

Paying attention to students may simply be aural and gaze-based, but my responses involved the use of gaze, gesture, proximity, and verbal modes in various conversations. Tucker and Nimer's engagement, for example, was clear: he was active, verbally and gesturally. By being aware of their modal preferences for making-meaning, I knew when they were actively involved in meaning-making. Similarly, Brittany's engagement was noticeable visually – her nonverbal responses denoted her investment. However, Johannes's lack of engagement at times meant that I needed an increased awareness on whether his eyes were close, his head was down, or if his phone was out. A multimodal pedagogy did not necessarily equate with increased student engagement across the board as extenuating circumstances can make some students hard to sustain involvement. The proliferation of cell phones, varieties of student interests, and out-ofclass factors all could have impacted Johannes's engagement. One successful way to get Johannes involved, came through my implementation of humor which manifested through a variety of modes.

Although present in only one of the three key events, I used humor – represented across the data archive – to increase engagement, respond to negative comments, and diffuse potentially difficult conversations. Nimer's accusation that Tucker's girlfriend was controlling was met with humor by myself and Johannes. Luckily, my awareness of students and prior community build-ing meant that my utterance was not offensive. Instead, appropriate humor functioned to sustain our relationships. Like a multimodal pedagogy, humor did not function as a cure-all. Instead, interventions were necessary.

Interventional interruptions. Across the events, there were interruptions initiated by students and by myself. I classified these as interventional because, generally, the goal of the participants – including myself – was to enrich the meaning-making process. Students like Brittany and Nimer would seek clarity in instructions for activities. They would ask for approval and whether or not their burgeoning products were correct examples. Although it might be considered part of the meaning-making process, examples like Tucker's mentioning of the "spear sharpened at both ends" interrupted the flow of dialogue between Brittany and I. However, this intervention only added depth to her ideas regarding a hypothetical defense of their shelters. At other times, the interventional interruptions were initiated by myself in the form of classroom management.

Classroom management was not a topic I anticipated addressing; however, as I analyzed the moments, I saw how my interactions functioned to ensure cooperation, engagement, and – when needed – redirection. In order to ensure that the "flow of social interactions," there were times when interventions were necessary (Au & Mason, 1982, p. 2). This included those represented in the data archive, like proximity control, gaze, gesture, and verbal redirections, and

those not present, like one-on-one conversations outside of the classroom, parent contacts, and guidance counseling.

At the same time, my interruption interventions redirected dialogue negatively. A participant may have been making a major point. For example, Tucker was wondering how to use parts of the crashed plane in a role-playing scenario. I interrupted the flow of his thoughts to ask about what other resources were on the island. As a result of my interruption, the conversation was redirected into the direction that I desired, rather than an organic dialogue. While redirection is necessary if student meaning-making was off-topic from the desired learning goal, my interruption cut off multimodal meaning-making possibilities in the conversation.

Unanticipated results. Given the "iterative" nature of this inquiry, unanticipated results were inevitable (Grbich, 2013, p. 17). The most surprising of these tied to Berger and Luck-mann's (1966) typifactory schemes and Gee's (2008) cultural models. While my theoretical framework made space for the conscious and subconscious stereotypes that the participants carry with them, I was surprised to see how they functioned in the three events.

The most noticeable example came when discussing Tucker's controlling girlfriend. This conversation featured assumptions about gender, relationship roles, and the expectations that the participants held for their real or ideal significant others. Brittany asserted that she would never be controlled in a relationship. Nimer assumed that physical relations were a top priority in relationships for males, while females want to be more emotionally fulfilled. However, an analysis of this conversation also led me to question how modes get used as power plays during conversation.

Nimer and Tucker were the most active verbal and nonverbal participants. While there was not unproductive tension between the two – as would be assumed in traditional power struggles – the back and forth dialogue included Tucker's interruptions and Nimer's subtle request for permission. Within the data archive, I saw that Brittany and Nimer often asked for help or approval significantly more often than Tucker and Johannes. I cannot state that this is a result of their genders, i.e. conclusively, males are more independent and women are more dependent and approval seeking, rather that in this particular group this held true throughout the two-week data generation.

Another unanticipated result gathered from this two-week period was my own lack of "withitness." While I considered myself engaging, personality-wise, and that the implementation of a multimodal pedagogy would inherently generate investment, this was not always the case. The recordings helped me identify blind spots. Although a literacy educator cannot be all places at once, especially during group activities, I learned that spending too much time with one group means that instruction is less effective for those not actively engaged in the meaning-making process.

While this addresses the first research question, at length, the following section provides a response to my second research question.

Transmodal Moments: What Occurs and an Analysis

For my second question, I asked: What occurs during transmodal moments (Newfield, 2014) and what are the implications of analyzing such moments for the classroom? My response to this question comes through three sub-levels: a reminder of the definitional work, an address to the first part of the question, and an exploration of the second half of the question stemming from the three multimodal moments.

Definitional work. Newfield (2014) used the "concept... in the examination of processes of transmodal translation in chains of semiosis" (p. 103). As meaning gets made from various modal stimuli, it gets translated across these different modes. A key part of this concept "refers to the external manifestation of semiotic consciousness" as a "'translation' of [an] idea into new or different" modes (p. 104). In other words, the concept focuses observable data and not internal thought processes. This was a major reason my data set was useful since my experience was recorded audiovisually.

While the meaning along a semiotic chain is typically "linked in theme or topic," there were punctuations that serve as "points of relative stasis and stability in ongoing, transmodal processes of meaning-making" (p. 103). Another way to say this is that by using the transmodal moment as a unit of analysis, I was able to fix a moment in time, not unlike a photographer does with a still image. During the course of my study, I saw how a "comparative examination of texts" allowed me to observe the shifts made along my three selected semiotic events (p. 104). For the three events, I selected a variety of multimodal moments and labeled them, like Newfield (2014), as texts. From the introduction to Brook's (1963) *Lord of the Flies* in the first event, to student conversations in the second event, and Brittany's Google Slides in the third event, there was a range of modalities represented.

First half of the question. Therefore, in response to the first part of my research question, transmodal moments served as a unit to report what I experience in class and repeatedly saw and heard through video analysis. Through repeated viewings, I generated a transcript and eventually constructed a schematic outline of what I identified as punctuations across each event. This approach functioned as a translation from my experiences into descriptive text for analysis.

Answering the first part of the research question would require me to simply re-describe the events themselves. The second part of the question, however, requires a more nuanced response.

Second half of the question. In analyzing each event using transmodal moments as units of analysis, I could better understand the impact a multimodal moment had across the events and the semester. I realize that my selection of the transmodal moments brings up the notion of granularity. How small a moment should I select to be considered transmodal? For example, when Newfield (2014) selected transmodal moments for analysis, she analyzed a South African preservice teacher's encounter with the New London Group's (1996) publication.

Rather than respond to the article in a traditional manner, the student, Kim, chose to produce "an artefact in a mode other than the verbal" rather than other pre-service teachers who "were used to writing summaries of articles" instead of alternative modes (Newfield, 2014, p. 105). Newfield broadly identified the texts as transmodal moments. For example, Text A was the New London Group's article. Text B was an "artefact produced by Kim to provide her interpretation of the article" (p. 106). It was a tangible production including clippings from magazines, books, matchboxes, cardboard, ink and other paper cut-outs.

While I respect this approach in understand how meaning gets transferred across the semiotic chain, and Texts A and B are punctuations along that chain, my microethnographic approach required a smaller gradation for what I considered to be punctuations. Given the space Newfield's (2014) concept provides, I'm confident with my identification of smaller moments within a smaller chunk of time. Another way to say this is that Newfield's student, Kim, read the article, likely discussed it in class, and responded using a variety of multimodal decisions as she created her artistic artifact. Within fifty-second to one-hundred-fifteen-second events, however, my transmodal moments were less broad and more specific.

Therefore, the implications of studying transmodal moments within the context of my study necessitated a granular shrinking of Newfield's (2014) original application. The theory holds: I sought to explore punctuations of meaning across the semiotic exchange. As I constructed the schematic outlines, I looked for transmodal moments that may have preceded and followed the events I identified. I chose to do so in order to provide the stimuli for what inspired our meaning-making events and honor the later products. In doing so, Newfield's theory supported my study: the "Janus-faced nature of the transmodal moment, a moment 'between' texts in different modes... a *relational* method in which an eye is kept on both the *prior* texts and the *subsequent* transmodalisations" (p. 104). In short, I compared texts as punctuations; there was a starting point and an end point that I subjectively identified for analytical purposes.

This line of inquiry suspends the questions of "Where did meaning start?" and "Where does it end?" I believe that this would end up with an "elephants all the way down" explanation that ends up with the Big Bang as the starting point for all meaning made. Instead, this line of inquiry responds directly to the second half of my question: what are the implications of analyzing transmodal moments in the secondary English Language Arts classroom? What Newfield's concept afforded me was the chance to identify how the curricular and textual decisions I made impacted classroom discussions, reactions to the text, and spawned artifacts. Specific examples from across the three events better clarify this assertion.

Having taught *Lord of the Flies* before, I saw that starting with the book itself did not engage students. However, using Brook's film introduction, I was able to display multiple modes that engaged students through multiple modes. Studying this as a text – as Newfield uses the term – inspired additional texts like note-taking, small group discussion, and the organic roleplaying that ensued. While I did select the initial text and designed a lesson which asked for

small group to large group discussion, I had no control over what my participants would identify as significant. Yet, through the lens of transmodal moments developed through a schematic outline, I followed the meaning-making chain. This afforded me the chance to see the impact from one transmodal moment, and my assumed meaning behind its use, to the next transmodal moment I identified. While subjectivity plays a major role in the identification of these transmodal moments as texts, it informed my later instruction. Therefore, a major implication within this study stems from how I used transmodal moments.

Transmodal moments, supplemented with "[ethnographic] approaches" gave me "additional dimensions" for "analysis of the transmodal moment" (Newfield, 2014, p. 104). Through conducting a microethnography with a semester-long class, I had "familiarity with context though observation," "discussion," and my role as an observant participant (p. 104). Due to the nature of conducting a study, I was able to experience, record, review, and repeatedly analyze brief events within my classroom in order to inform my instructional decisions. While the average secondary English Language Arts teacher doesn't record and analyze classroom video on a regular basis, my unique position as a researcher did.

Although Chapter 6 will better explore the larger implications of this study, within the context of my study, this frequent teaching, recording, viewing, and analysis of the data archive let me create curricular decisions based upon what I saw each day. This formal application of analysis led my thinking in a unique direction; although not solely due to my choice of transmodal moments as a unit of analysis, the concept impacted my decisions in a number of ways.

First, I began to see each multimodal moment as a potential landmark for meaning-making. If I could identify meaning-making transactions as meaningful towards my curricular goals, I could reinforce student utterances and reference them later. Next, the transmodal moments

served to help me identify student artifacts. The notes that students took, or, in the case of Brittany, the slides generated, could represent ideas connecting the text to other students, like Tucker, and reward each student involved throughout the chain of semiosis. For me, this is a major strength of using transmodal moments for analysis in my research setting.

However, this methodology and unit of analysis required time. As most literacy educators can share, between grading, meetings, and the ever-expanding duties of secondary public-school educators' experiences can show, time is valuable. Not every teacher can be expected to collect data with this timeliness nor analyze it as frequently. Rather, most teachers have enough on their plate. But, within the context of this study, the identification of significant meaning-making moments directly impacted my understanding of how learning resided within multiple modes. Furthermore, a useful unit emerged through the transmodal moment as a text for studying.

Finally, these results were made based upon the data archive, including scanned student work and interpretive field notes, and my preliminary and subsequent viewings of the audiovisual data generated. Additionally, these conclusions resulted from the constructed narratives, multimodal charts, and transmodal schematic outlines. However, this study is still subject to issues of trustworthiness. The following section explores the study's reliability using Maxwell's (2013) validity checklist as a standard.

Trustworthiness

First, as Maxwell (2013) stated, "no methods can completely assure" that a study's "conclusions of reality... have captured" objective truth (p. 121). Instead, the validity of this study "depends on the relationship of [my] conclusions to reality" (p. 121). As a single researcher constructing results from the study I designed using a particular theoretical and methodological framework, in addition to the curricula I developed, an inherent bias remains as a "key issue"
through the form of "validity threats" (p. 121). While these threats were not removed, they were accounted for through my primary guide in research design. Since Maxwell's (2013) approach to qualitative research design helped center, frame, and create this study, his validity test checklist helped to ensure my results did not suffer from researcher bias or reactivity. Instead this study was enhanced by the theoretical framework, methodological approach, and reflexivity – rather than reactivity – throughout the research process.

Maxwell's (2013) Checklist

Maxwell's (2013) checklist involved the following: 1) intensive, long-term involvement, 2) rich data, 3) respondent validation, 4) intervention, 5) searching for discrepant evidence and negative cases, 6) triangulation, 7) numbers, 8) comparison (pp. 126 - 129). However, it must further be noted that "not every [one of these strategies] will work in a given study" and "even trying to apply all the ones... might not be an efficient use of... time" (p. 125). Therefore, testing each step better ensures accuracy in my constructed results.

1. Intensive, long-term involvement. Becker and Geer (1957) stated that "long-term participant observation provides more complete data about specific situations and events than any other method" (as cited in Maxwell, 2013, p. 126). Because the data generation took place across a two-week period, this study hardly qualified as a long-term involvement. What did qualify was my role as their semester long teacher. Since the data generation took place approximately eleven-weeks into the semester, I was very familiar with each participant in the study, in addition to the class. Additionally, having taught at the research site for nearly ten years, I was very familiar with previous approaches to the tenth-grade curriculum and how my pedagogy would be accepted with support from my superiors. Although this was the second time I used the

curriculum, I was able to draw from something already developed and previously successful in my estimation.

2. Rich data. While this study did not include interviews, "observation[al]" studies rely upon "detailed, descriptive note taking (or videotaping and transcribing) ... the specific, concrete events that" were observed (Maxwell, 2013, p. 126). Having used a microethnographic approach, I developed a data archive featuring audiovisual data from two cameras, two audio recorders, scanned student work, and expanded field notes. These led to analytical constructions – from researcher memos, transcriptions, and the constructed results – that were grounded in data that produced thick, rich descriptions of the events. These practices denote common characteristics claimed by other microethnographers (Au & Mason, 1982; Bower & Griffin, 2011; Chang, 2003; Cherry, 1994; Erickson, 1986).

3. Respondent validation. Member checks were not a part of the methods, since interviews were not conducted. However, the goal was not to accurately pinpoint the meaning-made by my participants but respond to the research questions. Since both questions were inquiry-based and were responded to used interpretive descriptions and constructions based upon these, respondent validation did not occur. Again, not every part of this checklist functioned for this particular study.

4. Intervention. Maxwell (2013) simply stated that interventions came through "experimental manipulation" (p. 127). Furthermore, "the researcher's presence is *always* an intervention in some ways... and the effects of this presence" helps to "develop or test ideas" about the participants (emphasis in original, p. 127). Connectedly, this study was an inquiry into multimodalities within the secondary English Language Arts classroom and how analyzing transmodal moments both occur and impact literacy instruction. Therefore, by designing (New London Group,

1996) a curriculum with a multiliteracies pedagogical approach, an intervention certainly transpired with an aim to promote the social futures of my participants and the class as a whole.

5. Searching for discrepant evidence and negative cases. Unfortunately, this step does not work with my theoretical approach. I cannot find discrepant evidence or negative case examples since I was not testing a theory per say. Rather, I am report results constructed from observational data. Furthermore, the hallmark of my theoretical approach was anchored in the idea that there is "no monomodal culture" (Jewitt, 2011, p. 4). With this operating notion, I did not set out to prove that multimodality or transmodal moments occurred in my study. Instead, I presupposed that they are ever-present in the ongoing chains of semiosis. In other words, a basic tenant of this study presupposed that humans socially construct meaning through multiple modes. Therefore, my results were constructed from interpretive descriptions of the data through my epistemological outlook.

6. Triangulation. Maxwell (2013) asserted that triangulation comes through "collecting information from a diverse range of individuals and settings, using a variety of methods" (p. 128). The diversity of the data set came through a variety of data types across the modal spectrum. While the setting did not change, the decision to use a microethnographic methodology dictated that my goal was to describe "how interaction is socially and culturally organized in particular situational settings" (Garcez, 2008, p. 257). As such, the secondary English Language Arts classroom functioned in this capacity. However, I did not use more traditional means like member-checking through additional student interviews or have my participants evaluate my findings. I chose not to as a result of the already lengthy scope of data generated.

7. Numbers. Although I relied upon the qualitative tradition to guide the design of this study, an "implicit quantitative component" came through the construction of Newfield's (2014)

schematic timelines across varying short intervals from thirty to one-hundred-fifteen seconds. (Maxwell, 2013, p. 128). The modal instances and uses in the three events I selected were reduced to make my observations more "explicit" and more "precise" (p. 128). I verified the verbal and nonverbal modes for each study in order to respond to the questions. Some of my conclusions found that participants used modes in a variety of ways for a variety of purposes. Thus, I was able to use "numbers [in a limited capacity]... for identifying and communicating the diversity of actions" within my research setting (emphasis removed, pp. 128-129). Although this, by no means indicates a substantial quantitative element, it does provide additional insight and a structured multimodal analysis.

8. Comparison. Lastly, comparisons are typically a hallmark of quantitative studies in which "intervention and control groups" aid in the assessment of validity threats (p. 129). My comparisons are less formal, given that this was a qualitative "single-setting" study (p. 129). While I drew upon the body of research literature to inform this study, I do not have published results for comparison within this particular setting. Therefore, the modes used and the constructed results of this study stemmed from comparisons across the three key events and how Nimer, Tucker, Brittany, and Johannes communicated with each other and interacted with the curriculum.

Validity Conclusions and Positioning the Study

Fully cognizant that this study did not reach conclusions that were "securely grounded in irrefutable sense data," the results reflect responses to the research questions that are instead grounded in the data generated (Maxwell, 2013, p. 121). Therefore, rather than discuss the limitations of the study, I address potential conflicts of interest by positioning my study. While re-

searcher bias cannot be eliminated due to the inherently subjective nature of qualitative descriptions and interpretations, I kept the research questions at the center of this iterative inquiry. The two questions consistently framed my theoretical approach, review of the relevant literature, research design, and analysis of the data archive. Maxwell's (2013) validity checklist provided an invaluable tool for reflection. Furthermore, the microethnographic approach gives space for the assurance that the thick, rich descriptions resulted from the method's strength as "fine-grained" (Au & Mason, 1982, p. 3), "narrow[,] and in-depth" (Change, 2003, p. 145) interpretations tied to a "reporting process guided by a technique" (Erickson, 1984, p. 51). Finally, this chapter addressed what the "findings really mean" and what was the "most plausible explanation" (emphasis removed from original, Bloomberg & Volpe, 2016, p. 10). Yet, what do these particular results mean in terms of adaptability?

Adaptability, Instead of Generalizability

Two significant concepts surround generalizability in qualitative research: what the results can never represent and, contrastingly, what extrapolations can be made. Consequently, I chose the term adaptability to discuss how my results can be applied to other research settings. First, Rapley (2007) asserted that "the research text" cannot "capture' the lived experience or just present 'the facts'" (p. 128). Second, Becker (1991) made a powerful case for generalizations in qualitative research: they are not about how research settings provide the same results for similar research settings, rather they are "about a process, the same no matter where it occurs, in which variations in conditions create variations in results" (p. 240). Therefore, there is no "precise extrapolation of results to defined populations that probability sampling allows" (Maxwell, 2013, p. 138). Instead, to the best gradation possible, I made sure that my "argument is based on

the materials from my archive" (emphasis removed, Rapley, 2007, p. 129). To this end, the responses to the two research questions were generated from data that was collected by a guiding methodology, interpreted through my theoretical framework, and analyzed with a perspective that acknowledged the necessary space for subjectivity.

Rapley (2007) shared his "favourite maxim [:]... We think in generalities but we live in detail" (emphasis removed, p. 107). The details of this study have shown that the participants of the study used multiple modes to socially construct meaning with the curriculum, the teacher, and each other. Each participant, like each student in a classroom, has a predilection towards certain modal combinations. With a careful eye on the overt and subtle displays of attention and engagement, literacy educators can tell whether students make meaning based upon their own awareness within the classroom. Concomitantly, literacy educators need to recognize when engagement wavers and intervene appropriately in order to re-establish engagement. Furthermore, a shift has occurred from print-centric texts. No longer should the dominant forms of assessment in English Language Arts classrooms remain primarily based in speech and writing. The powers of gesture, gaze, space, layout, image, and audiovisual texts – whether used instructionally or by students – should not be ignored. This can ensure that the social futures of each student is equitable, fair, and appropriate for the unanticipated workforce, life worlds, and relationships outside of the classroom.

As for the use of Newfield's (2014) transmodal moments, the theoretical unit offers a metaphor for understanding how meaning gets transferred, translated, and transformed across the semiotic chain of meaning-making. By identifying and studying the individual instances within the classroom, literacy educators can perform a variety of tasks: formative assessments, summative assessments, community building, the development of significant touchstone moments for

future meaning-making, and – most importantly – identifying how individual students make meaning through specific and multiple modes.

The next chapter unpacks specific implications based upon the results of the study and the constructions from the data archive.

CHAPTER 6

UNDERSTANDINGS AND IMPLICATIONS

I approached this study with a number of preconceived notions based on an emblematic hunch. A former student, Rex, made an utterance in response to a review of *Beowulf*'s plot. His simple shout of "Hashtag Team Satan" got laughs, but ultimately made me think about the interaction of meaning across modes. Because of this, I dug deeper into the theoretical views related to multimodality. Thus, the research questions stemmed from my own subjective interests and these questions guided the development and design of this qualitative inquiry (Maxwell, 2013).

My early literacy experiences anticipated a number of preliminary assumptions about meaning-making and literacy practices. My formal education helped define the theoretical approach (Berger & Luckman, 1966; Gee, 2008; Jewitt, 2011; New London Group, 1996; Newfield, 2014) towards understanding the meaning-making processes in the secondary English Language Arts classroom. This theoretical framework includes both how my pedagogy informed daily lessons and how the students themselves made meaning through combinations of modes. Jewitt (2011) believed that "multimodality approaches representation, communication and interaction as something more than [written or spoken] language" (p. 1).

With these ideas in mind, an ongoing review of the literature and the microethnographic methods (Au & Mason, 1982; Bower & Griffin, 2011; Chang, 2003; Cherry, 1994; Erickson, 1986) generated a digital archive of audiovisual data from a nearly two-week study. While the previous chapter discussed the specific results of my study, I have yet to frame these in a broader sense. This chapter unpacks my understandings – what I've come to learn from the study – and

the implications – what my results mean and what I, literacy educators, and policy makers might do with this information.

Understandings of Multimodality, Microethnography, and Transmodal Moments

From my analysis of the data archive, I selected empirical evidence to help me explore two research questions. First, I asked, "What happens when students construct meaning through multiple modes and what are the implications of studying a multimodal pedagogy for English Language Arts?" To briefly answer this, I found that – even within the rigid expectations of the Standards Era classroom (Nichols & Berliner, 2007) – students find unique ways to express themselves through combinations of modes that are not traditionally assessed. These expressions were attached to so much more than the utterances themselves (Gee, 2008); student expressions of meaning making connected and reflected individual interests, group memberships, cultural assumptions, and developing theories about how people interact.

For my second question I asked, "What occurs during transmodal moments (Newfield, 2014) and what are the implications of analyzing such moments for the classroom?" The use of gesture, gaze, speech, sound, and various forms of body-posturing got explored across fifty-five to one-hundred-fifteen second events. Although thirteen hours and nine minutes of audiovisual data were gathered, the three most poignant events, mere seconds, were selected for analysis. Yet, this is the general goal for microethnographic research – understanding smaller, everyday events – and was a goal for this study in particular. From these three events, I saw multimodal microtransactions that explored student connections with the curriculum, with each other, and with myself. Without using a microethnographic approach (Au & Mason, 1982; Change, 2003; Erickson, 1975, 1984, 1986; Garcez, 2008; Mehan 1979), I would not have gathered the audio-

visual data necessary for creating a "description, analysis, and interpretation of a slice of everyday life" within my research setting (Stokrocki & White, 1995, p. 52). A broader understanding of my exploration of these two questions can best be presented in the following two sections: what I have come to understand about multimodality and what I have learned about using a microethnographic approach to understand everyday events in the English Language Arts classroom.

Multimodality

In assessing the student use of multiple modes, specifically through inquiry-based research, I generated more data to support Jewitt's (2011) theory that "there is no monomodal" group of people (p. 4). This additional evidence links to an overt goal of the study and a major conclusion of Chapter Three – empirical evidence within my research setting was lacking. However, since this study's completion, I went back to the literature and found additional publications linked to my results.

As of February 2018, by filtering Google Scholar from 2015 to the time of this writing, a search yielded about 15,600 results for "multimodal+literacy." This includes book chapters, articles, theses, and other academic texts like presentations and classroom documents. Google's quantitative analytics no longer list the precise number, hence the "about" being used in the results. While this number is staggering, adding additional search constraints shrunk the results. For "multimodal+literacy+secondary" the number dropped to 10,700. Using "multimodal+literacy+secondary+English+Language+Arts" the results dropped further to 6,360. Alvermann's (2017) exploration of multimodality, new literacies, and multiliteracies accounts for this issue: the reason these search results are numerous is due to the proliferation and confusion of the terminology's application.

Alvermann (2017) stated that multiliteracies "is often conflated with its so-called near synonyms – multimodal reading and writing, new literacies, digital literacies, and multiple literacies." In an effort to "[reclaim] multiliteracies as a pedagogical framework... delineating the parameters that separate a pedagogy of multiliteracies from more loosely associated constructs" could help impact policy, teacher educators, and teachers themselves. This could function by shifting popularly misused and misapplied terms towards the New London Group's (1996) intended goal of create student meaning-makers who design their own social futures (p. 99). This is not to say that the NLG's approach should be canonical and dogmatic; rather, that terminology can and does get altered and, arguably misused. For example, Cherry's (1994) thesis claimed to use a microethnographic approach but did not cite microethnographers nor followed what I believe to be a microethnographic approach to the classroom. Simply put, misuse of terminology happens.

Another way to say this is that I saw a link between Alvermann's (2017) goal to clarify and reclaim a term as an approach – as opposed to capitalizing on a research fad – and consistencies within the field and my study. In order to explain what I've come to learn about multimodality, I use additional studies to support my understandings. This is because there are numerous consistencies between this study and the field of literacy education. In the time since the initial review of the literature, I found many relevant publications that conceptualize, advocate, or specifically study the approach I advocate. Less specific still is published work relating to my particular research setting. I start by sharing the most saliently consistent pieces to the study I carried out and rationalize how they relate. Like Alvermann (2017) predicted, the proliferation and conflagration of terms created a variety of research topics that are similar but explore the topics in different ways. Zoch and Myers (2017) explored how multiliteracies facilitate teacher engagement to help implement technology. George, Pope, and Reid (2015) reflected "on the changes that have occurred in English language arts teacher education in the past 15 years" (p. 1). Similarly, Rodesiler and Pace (2017) focused on screen-based multimodal critical literacy for pre-service secondary ELA teachers. Of primary importance was the influence and integration of technology. Since my study's completion, I have found that the integration of Chromebooks, Google Slides, and Google Docs have significantly changed the multimodal ways I technologically interact with students and, subsequently, how students make meaning.

In other words, though screen-based technologies shouldn't be equated with multimodality, ongoing developments in software and hardware have certainly impacted my classroom practice. With Rex in 2013, *I* used Microsoft PowerPoint to a limited extent; it displayed information and provided me a chance to discuss and display my understanding of a text. In contrast, I now use multiple Google products to facilitate an organic and ongoing approach to literacy interaction. My tenth-grade *participants* used Google Slides to cooperatively edit a presentation; Johannes, Tucker, Nimer, and Brittany worked, in real-time, taking advantage of text, layout, and visuals. Additionally, they interacted through speech, gaze, gesture, and body posture to make meaning during this social construction of a presentation.

Serafini (2015) provided a conceptual piece which advocates for using a multiliteracies approach to close reading. Although it is primarily directed towards critical media exploration, the manner in which my study explored a variety of texts, through a variety of modes, and recorded multimodal student responses to the curriculum, I see many parallels. My students were

provided opportunities to interact with texts embedded in a variety of modes. They responded in a variety of ways. Although they ultimately created a more traditional piece of writing through synthesis at the end of our *Lord of the Flies* unit, the path towards the final assessment was paved with multiple modes.

Serafini (2015) also advocated for a more complex approach to designing curriculum so that "as texts grow in complexity, adding visual images, multimodal designs, and digital technologies[s], the strategies for accessing, navigating, comprehending, and interrogating these texts must grow as well" (p. 56). While this notion is advocatory, my study found that the variety of reactions to texts are, in fact, growing in complexity. As the NLG predicted, these complexities multiply given the increase in globalization and the growing gap between socioeconomic groups. As such, a "multiliteracies toolkit" helps students unfold the possible intentions of text designers as students make meaning along their and the author, writer, director – or, more simply – the designer's semiotic chains (p. 55). However, additional select studies show parallels to what I've come to understand about multimodality.

Bock (2016) used a case study to explore multimodality and creativity with the drawings, early writings, and imaginative role play of two children, aged 8 and 11. Using a similar theoretical framework to this study's, Bock focused primarily on the "personal and social" interests of the "sign-maker" (p. 18). Similarly, Hiippala (2016) explored the individual and collaborative semiotic work in document design. Although this study didn't focus on children, but on professional project managers and graphic designers in Helsinki, the findings on collaborative planning and production link well with the final event I analyzed – Brittany's slides and Tucker's utter-ances about the spear. My participants helped me see that individuals socially negotiate meaning

through multiple modes, linked to design, "agency," (p. 52) and "transformations" (p. 54) across semiotic chains of meaning-making.

I combined modern and traditional assessment methods in my curriculum order to provide opportunities for student representation. Whether it was reading traditional print-based psychological articles or reacting to modern TED Talks, my students engaged with a variety of multimodal texts responding through multiple modes. Similarly, Archer (2017) found comparable results in secondary South African classrooms. She explored the "designs for learning which [recognized] students' semiotic resources," an analogous goal of this study (p. 9). Within her study, design was linked to student ways of choosing how to represent their knowledge: through a flexible pedagogical approach, students responded in a variety of ways, both traditional – written – and more modern – multimodal. The use of "unregulated spaces" provided a "critical way of" developing "through discussion and argument" (p. 15).

Another study by Ravelli (2016) analyzed how Australian military recruitment videos were analyzed critically by a "tertiary-level" course. This involved using a social semiotic perspective to unpack how "verbal art" was viewed as a multimodal text by students using a deliberately designed strategy by the literacy educator (p. 32). This connects with my use of Brook's (1963) film as an introduction. Although more audiovisual in nature, I better understand how participation can be increased through more engaging modes, like film.

I also better recognize how the social construction of knowledge connects with multimodality. Pillay (2015) reached similar conclusions in that "learners in groups worked together to construct... [meaning]" (p. 69), modes helped "redesign" meaning along semiotic chains (p. 70), and communication was never monomodal (p. 72). Instead, her approach as the teacher led to a

strengthened endorsement of a multiliteracies pedagogy. This, too, was an overt goal of my research.

It may be obvious to assert, but my understanding of multimodality has increased as a result of performing a microethnographic study. Instead of a generalized view, based upon my own experience, I explored multiple modes in depth for a sustained period of time. A sustained generation of data, systematic review, regular description, and eventual analysis led me to a deeper understanding of multimodality within the secondary ELA classroom. However, this analysis also helped me develop understandings about the nature of microethnography and how it can improve my practice.

Microethnography and Transmodal Moments

I see microethnography and transmodal moments as intrinsically linked. While I could conduct a microethnographic study with a different set of theories and another methodology, only through reflective analysis was I able to determine transmodal moments. I chose events subjectively but using transmodal moments as a unit of analysis essentially forced me to see meaning-making punctuations along semiotic chains. Without a microethnographic approach, I would have missed these often temporally-small punctuations.

The small, seemingly *invisible* moments were unpacked with deliberate clarity through description and analysis. I found that the first part of my second research question – "what occurs during transmodal moments" – was rather simple to respond to. In fact, it was a matter of reporting the transmodal moments as I saw them. Albeit based upon my subjective selection of events; the four students used multiple modes in varying combinations as they approached varying tasks and my interpretive descriptions shared what I saw. Simply put, the combinations of modes depended upon the student's individual modal predilections and interactions with each

other. These combined modes were identified as texts, following Newfield's (2014) concept of schematic outlines. However, the latter part of the second question – "what are the implications of studying transmodal moments" – was more difficult to respond to. In doing so, I understand more about the method and my practice as a result.

I learned the most from using a microethnographic approach. Although the data archive was generated over a two-week period, I found that many landmark utterances were regularly referenced throughout the remainder of the unit. Whether it was a student or myself, the aggregate meaning-making events became beacons for bridging connections. Much like Rex's utterance, the use of memorable transmodal moments – whether because they were funny, poignant, or emotional – helped create links. While these links could be seen as punctuations on the semi-otic chain, they were more. Our experiences informed our burgeoning meaning-making. Like classroom jokes that live on throughout potentially four years of high school – and sometimes beyond – these episodes helped me better understand how experience informed knowledge construction. More significantly, the microethnographic approach required me to look, listen, write, and think through how multiple modes were used by students.

As a teacher, I saw the strength that a multiliteracies approach had on a microcosmic level. While I have always incorporated audiovisual and kinesthetic modes into the classroom, I had done so without a rationale beyond *perceived* and *assumed* increases in engagement. However, using a theoretical approach wholly entrenched in how multiple modes can be harnessed in a curriculum with an aim towards specific designs can impact how meaning gets made. Furthermore, designing a curriculum that provides access to multiple Discourses gave the students a chance to see, hear, feel, and experience canonical literature through multiple lenses: psychological, moral, and participatory. In other words, so much more was done with a canonical text than

explore vocabulary, history, plot, and theme. We had personal responses as a result of the curriculum's design. It's rewarding to have had a hand in this.

It may seem obvious, but a microethnographic approach unveiled many flaws in my teaching. Audiovisual recordings captured students off task. The cameras were also, at times, distractions for the students. Video recordings helped me see that I could spend too much time helping certain students at the expense of others who needed purposeful redirection. While it can be disconcerting to see my mistakes, growth comes from realizing what went wrong and channeling this into what can be improved. Herein lie some inherent connections between what I have come to understand about the results of my study and what it can mean for a variety of audiences.

Implications of the Study

My understanding of the study also has led into what I believe my study *means*. The remainder of this chapter, explores the implications of this research, divided into several sections. First, I share what my results mean to me. Next, I provide guidance for literacy educators. Afterwards, I argue how scholars can use this study. Finally, I discuss what this research can mean for policy makers.

For Myself

Using a traditional text like *Lord of the Flies* demonstrated how I could design a unit with multiliteracies at the forefront. Intentionally designing a unit with this framework meant that the inclusion of other material required modal variety in both my presentation of the information and as options for student responses. In other words, the ways in which material was delivered, transacted with, and responded to needed to intentionally prepare students to decode, deconstruct, and reconstruct using a plethora of modes. But, this wasn't about novelty for novelty's sake. In using

multiple modes in lesson planning, students were given access to multiple discourses. Through Golding, students could see a British author's interpretation of his experiences and a fear of the Cold War. History and a concern for humanity was shared. Through the psychological studies, I was able to give students differing views of what we are morally capable of. In using audiovisual texts, we constructed meaning out of modes that are extremely relevant today.

I can't help but think how the vehicles for meaning have shifted in the ten years I've taught and in my experience as an ongoing student. Earlier chapters shared my passion for story through multiple modes. When younger, I had a hunch about how information gets delivered and how this impacts reception. This study provided the chance to see how, although similar modes continue to be used – text, speech, audio, visuals – they continue to be combined in unique ways. Understanding the power of individual modes and multiple modes in combination has informed my pedagogy. More specifically, it will inform the next students I teach.

While the *Lord of the Flies* unit was designed to reflect curricular decisions from another course, my department's revamped senior literature class, my immediate future will feature lessons consciously designed to feature access to traditionally assessed modes supplemented by a multiliteracies pedagogy. As a result, I hope to truly impact the social futures of every student I teach so that their socioeconomic changes are more equitable. I want critical thinkers capable of consuming and creating media with an eye for audience, rationale, intention, and – significantly – for how each utterance can benefit themselves. I don't mean for this benefit to be simply in terms of social status or economic gains; instead, I want students to be aware of tensions and possibilities, pitfalls and opportunities.

As for the distant future, I see that I need to continue having my fingers on the pulse of technology. While I do not equate multimodality with simply screen-based application, a multiliteracies approach means understanding the technological delivery vehicles for meaning. I predict that software development will continue to drive how we make meaning through audiovisual and textual combinations. However, hardware development will impact the speed of communication and the increase in globalization. Our contemporary period is currently unravelling the effects of social media on the outcome of the 2016 election. Regardless of where one resides on the political spectrum, my pedagogical goal of creating critical consumers means that students will evaluate the media they come across in an appropriate manner asking themselves: who created this, for what end, and how can I respond?

For Literacy Educators

Just as I hope to develop socially and critically aware students, other literacy educators, too, can continue to design curricula that reflect the shifting needs of our students. As communication technologies continue to rapidly shift and the world continues to shrink, an understand of the ways in which modes get used becomes all the more important. In staying apprised by shifts in student languages, shifts in technology, and shifts in meaning-making, teachers can be better informed for instruction. Along the same lines, teachers – with the goal of educating children to become critically-minded citizens – should be aware that a multiliteracies pedagogies provides opportunities for access. Traditional methods of teaching alone can be dated and restrictive. Therefore, I suggest that teachers continue to stay informed as new technologies – software and hardware – impact the ways in which we communicate.

Another major way for teachers to build upon this study is to be realistic in their expectations for what they observe. While a literacy educator cannot track every utterance – or for that

matter generate data archives for analysis – they can pay attention to ways in which individual students use which multiple modes and to what end. In other words, constant reflection on the modes through which students make meaning are a boon in understanding how to reach students through engagement and assessment.

For Scholars

While the New London Group's (1996) ten authors advocated for and outlined an approach to teaching that impacts the social futures of students, their call for a larger and more dramatic shift has yet to be heeded. Current Georgia standards are beginning to approach the significance of multiliteracies within the secondary English Language Arts curriculum; yet, this section of the standards remains small. My initial and subsequent review of the literature does not create a bleak picture; however, a stronger response to the call is needed within this study's particular setting.

Relatedly, while this study provided additional empirical evidence, significantly more is needed to better understand how multimodalities and a multiliteracies approach impact class-room meaning-making. Specifically conducting microethnographies will add to this, but other methodologies – over longer periods of time, with more participants, in a variety of geographical locations – could yield more evidence supporting similar pedagogical approaches. Once completed, additional surveys of the research would yield stronger generalizations about how multi-modal meaning-making unfolds within the classroom – whether it is the result of the students merely transacting with each other or from the intentional design of educators.

For Policy Makers

Although policy makers can be maligned for having rigid adherence to tradition, they play a major role in shaping classrooms. From national boards developing standards, to state superintendents implementing them, to department heads required strict adherence, the policy makers can dictate the direction of English Language Arts classrooms. Rushkoff (2013) stated that "94 percent of communication... occurs nonverbally." If this estimate is close to accurate, more emphasis needs to be placed upon the nonverbal modes within literacy classrooms.

This study provided the experience of one classroom teacher's interpretation of four participants; it provides a picture of how designing lesson plans with a multiliteracies pedagogy can provide learning experiences, rather than a list of steps to be met or requisite knowledge to regurgitate. With that in mind, the assumption that standards follow stages to be met miss the significance of flexibility within the classroom. So, specifically for superintendents, administrators, and department heads, I suggest avoiding standardized approaches to literacy education. This includes requiring "same day, same page" policies.

Instead, a flexible pedagogy that implements new texts, multiple modes, and allows for a diverse range of responses can foster unique learning opportunities. This does mean that policy makers should abandon requiring the privileged written and spoken modes of the dominant discourse; instead, they should be included with a stronger emphasis upon multimodal learning opportunities.

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Date	Data Generated
10.18.2017 Cornell Notes and Image Analysis	Left Video Part 1, Right Video Part 1, Left Video Part 2, Right Video Part 2, 4 Participant Scans of American Socie- tal Influences, Field Notes 01:30:00 minutes filming
10.19.2017 First Synthesis Paragraph Construction	Left Video, Right Video, Audio Recording, 4 Participant Scans of Brainstorming Notes, 4 Participant Scans of Co- constructed paragraphs, Google Slides Converted to PDF 1.0, Field Notes 00:38:24 minutes filming
10.20.2017 Systems of Government	Left Camera, Right Camera, Left Audio, Right Audio, 4 Participant Scans of Fast Five Activity and Cornell Notes, 1 Scan of Group Government Creation, Field Notes 00:24:36 minutes filming
10.22.2017 Analysis	10.18.2017 Initial Observations 10.22.2017 Google Doc - Analysis of video seeking patterns and meaning-making efforts, Field Notes 02:42:00 minutes spent working
10.23.2017 First Chapter	Left Audio, Left Video, Right Audio, Right Video, Brit- tany's Scan of Notes, Field Notes 00:41:12 minutes filming
10.24.2017 Lost at Sea	Left Video, Right Video, Left Audio, Right Audio, Field Notes 00:42:27 minutes filming
10.26.2017 Close Reading	Left Video, Right Video, Left Audio, Right Audio, 4 Par- ticipant Scans of Close Reading Annotations and Written Responses, Field Notes 00:43:12 minutes filming

APPENDIX A: TIMELINE OF UPLOADS, INITIAL VIEWINS, AND ANALYSIS

10.27.2017 Things Break Down and Failed Utopias	Left Video, Right Video, Left Audio, Right Audio, 4 Par- ticipant Scans of Think Alouds and Written Responses, Field Notes 00:38:13 minutes filming
10.29.2017 Analysis	10.19.2017 Initial Observations 10.29.2017 Google Doc 02:00:00 minutes spent working
10.31.2017 Next Synthesis Paragraph	Left Video, Right Video, Left Audio, Right Audio, 4 Par- ticipant Scans of Synthesis Paragraphs, Field Notes 00:30:59 minutes filming
11.01.2017 Leader Campaign Work- shop	Left Video, Right Video, Left Audio, Right Audio, Field Notes 00:56:54 minutes filming
11.02.2017 Leader Campaign Presen- tations	Left Video, Right Video, Left Audio, Right Audio, PDF of Student Presentation for Leader, Field Notes 00:06:40 minutes filming
11.05.2017 Analysis	10.20.2017 Initial Observations 11.05.2017 Google Doc, 10.23.2017 Initial Observations 11.05.2017 Google Doc, Theory and Observations Google Doc, 10.24.2017 Initial Observations 11.05.2017 Google Doc 02:50:00 minutes spent working
11.08.2017 Analysis	10.26.2017 Initial Observations 11.08.2017 Google Doc, Additions to Theory and Observations Google Doc 01:22:00 minutes spent working
11.09.2017 Analysis	10.31.2017 Initial Observations 11.09.2017 Google Doc 01:25:00 minutes spent working
11.11.2017 Analysis	10.27.2017 Initial Observations 11.09.2017 Google Doc, Additions to Theory and Observations Google Doc 01:30:00 minutes spent working in the morning 01:20:00 minutes spent working later in the morning
11.11.2017	Selection of Transmodal Moments for Transcription Com- plete after initial viewing(s).

Totals	Length of Data Generation: 10.18.2017 - 11.02.2017, just over a two-week period of time (apart from mandatory PSAT testing) during a <i>Lord of the Flies</i> synthesis writing unit
	Length of first viewing and note-taking: 10.22 - 11.11 across 789 minutes or 13 hours, 9 minutes
	Total Generated Documents during Generation Phase: 67
	Additional Documents Generated during Analysis: Total Generated Audiovisual Data: 412 minutes, 37 sec- onds or 6 hours, 52 minutes, 37 seconds