Ghostly Entanglements: Exposing Temporal Matter(ing)s in Social Studies Education with (Re)Photography

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Ghostly Entanglements: Exposing Temporal Matter(ing)s in Social Studies Education with (Re)Photography

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Dedication

I dedicate this work to the three most important people in my life: Kristen, Gwen, and Sawyer.

Your love/support haunts me (forever).
Acknowledgements

I would like to express my utmost gratitude to the members of my dissertation committee: Drs. Michael Berson, Vonzell Agosto, Ilene Berson, and Leia Cain. Throughout this process, your wisdom was not only guiding/supportive but troubled my thinking in numerous ways and allowed me to (constantly) explore (ghostly) territories of un/certainty. I am eternally grateful for your patience and for your belief in my thinking/writing.

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To Pappy, Karen, Susan, Terry, and other family members, thank you. To my (late) Mother, I know you would have been proud of me and of this artifact. To my wife Kristen, daughters Gwen and Sawyer, and future readers of the dissertation, remember—wonderous things await us when we are brave enough to explore rabbit holes. In those spaces of non-linearity and disorientation—where the Time is (forever) out of joint—we can en/vision a better world and truly set our imagination(s) free. Lastly, I would like to acknowledge the thinking/writing of pastpresentfuture(ing) posthumanist and poststructuralist thinkers. Your
conceptual artistry has/will (always) (re)shape(d) how I make non/sense of the inter/intra-connected (social) world.
Repetition and first time, but also repetition and last time, since the singularity of any first time, makes of it also a last time. Each time it is the event itself, a first time is a last time. Altogether other. Staging for the end of history. Let us call it a hauntology.


Time is had been crossed out. Time drawn out like taffy, twisted like hot metal, cooled, hardened, and splintered. In the twentieth century, time is given a finite lifetime, a decay time. Moments live and die. Time, like space, is subject to diffraction, splitting, dispersal, entanglement. Each moment is a multiplicity within a given singularity. Time will never be the same—at least for the time-being.

–Karen Barad, No small matter in *Arts of Living on a Damaged Planet*, 2017
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Abstract

Visual resources offer a variety of pedagogical advantages. Regardless of content, images can be leveraged to build critically analytical skills and used to cultivate dialogic literacies (i.e., articulations of thinking) about the social world. Further, images can be used to introduce and grapple with complex/abstract ideas. Given the relationship that social studies has to temporality (i.e., subjective engagements with the past, present, and future), visual resources also present teacher(s) (educators) with the opportunity to explore (theoretical) concepts foregrounding manifold relationships making up the social world (i.e., a world consisting of complex entanglements between non/human entities).

The purpose of this research was to examine how secondary students dis/connect to the social world and the notion that every facet of historical phenomenon bears traces (upon traces) of multi-dimensional perspectives that deserve to be contemplated, interrogated, and valued (Derrida, 1993a). Specifically, this research was interested in understanding how foregrounding the relationship between space, time, and matter impacted secondary students’ engagements with temporally disjointed images or (re)photographs. As such, this inquiry asked: (1) What does (re)photography expose about secondary students’ dis/connections to the social world? (2) How do students dis/entangle with spacetime matter(ing)s when exposed to (re)photographs?

Visual methodologies—specifically photo elicitation—were used to explore what was produced by 21 secondary students enrolled in a Global Perspectives course at a public high school in Northwest Florida during the 2019-2020 academic year when they engaged with (re)photographs and the concept of spacetime matter(ing). Posthumanist and poststructuralist
perspectives informed the interpretation of the data corpus for this study, which was comprised from a collection of artifacts, observations, and semi-structured focus group interviews.

Through a process that involved (re)reading, annotating, illustrating, and (re)organizing, the data was reduced/(re)organized into three overarching themes: (1) dis/connecting to (re)photography; (2) dis/connecting to materiality; and (3) pastpresentfuture(ing). These themes are teeming with assorted inter/intra-connected subthemes and were then used to help articulate three overarching findings: (1) (re)photography exposed how secondary students dis/connected to the social world and how they study it; (2) materiality plays a role in meaning-making; and (3) changes to materiality impacts how secondary students conceptualize temporality.
Chapter 1: Introduction

1.1: Overview

Currently, we—humans—are experiencing the result of failing to connect the past and present with the future (Archer & Ramstorf, 2010; Haraway, 2016; Lovelock, 2007; Tsing et al., 2017). From the rising sea levels and increased global temperatures to the mass eradication of numerous plant and animal species, our world is changing. Along with this change, people’s perspectives about the (entire) world have shifted. According to Tsing et al. (2017), “as humans reshape the landscape, we forget what was there” (p. G6), which in turn, normalizes the damaged state of our world(s). If true, then our capacity to image what awaits in future landscapes will be severely limited (Rydén, 2019). However, thinking about the complex entanglements between temporality and matter(ing)s of the world with a ghostly/haunted perspective reveals opportunities to develop more complex relationships between the intensities of the world and possibly extend our thinking beyond that which is (merely) human. On this matter, Tsing et al. (2017) say,

> Forgetting, in itself, remakes landscapes, as we privilege some assemblages over others. Yet ghosts remind us. Ghosts point to our forgetting, showing us how living landscapes are imbued with earlier tracks and traces...Ghosts remind us that we live in an impossible present—a time of rupture, a world haunted with the threat of extinction. (p. G6)

When people use the present to dwell strictly on the past, it is possible that a crystallization of forgetfulness regarding repercussions of our actions on future may occur. If, and according to the

---

1 Throughout this inquiry, the “/” is employed in an attempt to temper the binary through the acknowledgement of existing relationships between two concepts that is inter/intra-active and complex (Barad, 2013). This typographical approach embraces a continuum of meaning/understanding that is intended to expose un/expected and nomadic possibilities.
National Council for the Social Studies (NCSS), the main over-arching purpose of social studies is “to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world” (NCSS, 2010), then the potential results of those decisions must be factored into the process. Perhaps a return to the past will help us—teacher(s) (educators) and students—to forget the present limitations of social studies education and (re)imagine an approach that can cultivate a more connected and sustainable future.

1.1.1: Visualizing temporality. While classrooms are traditionally text-based, visual images present social, historiographical, and culturally dynamic ways of approaching history (Berson et al., 2017a.). Despite being contained to historically fixed localities, photographs can be utilized—through re-photography—in a way that destabilizes temporal demarcations. I do not wish to dictate the emergence of specific affects relating to historical actors and matter(ing)s but rather, present students with content-related resources that suggest temporal unconventionalities and disjointedness pertaining to space, time, and matter(ing).

While there is an ample body of research on the use of primary sources in social studies education, research that infuses temporal disjunction and primary sources is scarce. As the troubles and in/congruencies of social studies education are well-documented (Hess, 2002; Hunt & Metcalf, 1955; Ravitch, 1989; Ross, 2006; 1992; Thornton, 1991), this inquiry seeks to explore how (re)photography and spacetimematter(ing) influences secondary students’ conceptualizations of temporality.

In this study, I explored what was produced when students engaged with social studies related (re)photographs through a framework underpinned by posthumanism and poststructuralism. To investigate the ways in which these (re)photographs (re)shaped students’
relationships to temporality and materiality, I asked: (1) What does (re)photography expose about secondary students’ dis/connections to the social world? (2) How do students dis/entangle with spacetimematter(ing)s when exposed to (re)photographs? Next, I discuss the purpose, problem, and rationale undergirding this inquiry, my background as an educator/researcher and assumptions, present a glossary of terms, and state acknowledged (de)limitations and assumptions. I will also use this chapter to introduce the main theoretical concepts informing my perspective throughout this inquiry.

1.2: Purpose, Problem, and Rationale

Classrooms are changing. According to U.S. Census Data (2014, 1974), the makeup of American classrooms has shifted significantly over the past four decades. With each passing year, teachers are responsible for connecting with expanding groups of diverse students. This includes students from varying socio-economic backgrounds, those with dis/abilities, various ethnic backgrounds, and a growing spectrum of familial circumstances (single parent, same-sex or interracial parents/guardians, and blended families). Despite the changing landscape of students, educators are (still) required to teach in a way that is confined by standards and assessments. This in turn stratifies education by encouraging/pressuring teaching to increase the “quantity of instructional hours solely in the subject areas that are tested (reading, writing, and mathematics), to the near exclusion of all else” (Byrd & Varga, 2018, p. 27). Relating to social studies education, less time is spent conceptualizing and actualizing curricular/pedagogical/theoretical ways of thinking about temporality and all relationships comprising the social world. This is highly problematic and stymies civic, environmental, social, and temporal interest/acumen amongst students (Burroughs et al., 2005). Moreover, students are not given the opportunity to develop a temporal perspective that accounts for the ways in which
history/ies of the past (re)turn and (potentially) influence how decisions about the future can be (re)shaped. While strict temporal demarcations can help students categorize events, putting them into conversation with each other presents an opportunity to engage with an iteration of temporality that is relational, fluid, and pliable.

According to the National Council for the Social Studies (NCSS) Theme 2: Time, Continuity, and Change, a goal of social studies is to promote “experiences that provide for the study of the past and its legacy” (NCSS, 2010). However, not touched upon in this approach is the way that one’s relationship to the past impacts what is to (be)come of the future. When students begin to consider all temporal aspects of history (i.e., past, present and future), they begin to formulate deeper, more complex relationships to the world (Wansink et al., 2018). As such, I consider this inquiry to be a journey through/across multiple folds of time and matter that exposed what was produced by secondary students after engaging with temporal-themed (re)photographs and the notion that every facet of historical phenomenon bears traces (upon traces) of multi-dimensional perspectives deserving to be contemplated, interrogated, and valued (Derrida, 1993b).

1.2.1: Limited and problematic approaches to the past. Traditionally, social studies education involves having students engage with facts and data from the past so as to further develop reasonable judgements about human matter(ing)s (Barton & Levstik, 2004; Kuhn et al., 1994; Rosa et al., 1998). This anthropocentric approach includes the cultivation of historical literacy (i.e., human-centered narratives) (Lee, 2007, 2004; Roderigo, 1994), historical thinking (i.e., evaluation, identification, and (re)construction of significant past events) (Husbands, 1996; Seixas, 1993; Van Sledright & Frankes, 2000; Wineburg, 2011), historical consciousness (i.e., having an awareness of the past) (Jeismann 1997; Von Borries, 1997), and historical reasoning
(i.e., interpretations of the past) (Kuhn et al., 1994; Leinhardt et al., 1994). While each of these sub/approaches to history has variance, they are not concerned with exposing a fluid relationship between past, present, and future that extends beyond traditional humanist trappings of the past. According to Wineburg (2011), if no attempt is made by educators to develop a more complex and nuanced relationship to the world with students, then “we are doomed to a mind-numbing presentism that reads the present onto the past” (p. 87). As our past and present students are the custodians of future worlds, this is extremely troubling and dangerous to the sustainability of all (future) matter(ing)s comprising the inter/intra-connected (social) world we (think) we know.

1.3: Researcher Background

Having spent close to 20 years teaching social studies, I have had the opportunity to connect to many students. While these connections have been made with elementary, middle, and (currently) high school students, throughout my career I have noticed students struggling to develop extensive relationships to lessons, concepts, and discussions that reverberate with them once they have left my classroom. As I have poured myself into the development of critical lessons that interrogated commonly veiled aspects of (historical) inequity and injustice, I too have grappled with how to create social studies lessons connecting the past, present and future.

This challenge soon became one of the reasons why I pursued a doctorate degree and ultimately took up a temporal line of inquiry for this dissertation. Despite not exclusively focusing on entanglements of time throughout my studies, a major life occurrence the second week into my graduate program would eventually become the impetus for this dissertation. On January 21, 2016, my mother transitioned from physical being, to something else. Even now as I touch the plastic letters and numbers sprawled beneath my fingertips and conjure the (last) memory, I can feel my heartbeat rhythmically begin to shift. Thinking back to that space and
time and the entanglements of matter(ing) surrounding her body, I am back in San Francisco, in
the hospital room with my family, staring at the machines, buttons, bags, tubes, valves, cords,
plugs, and switches all pulsing with each of Mom’s (last) breathes.

In 2005, Dr. Todd May argued that thrust of philosophy should be framed around the
question: How might one live? Within the context of social studies education and the way my
Mother’s passing influenced my perspective relating to non/human relationships, I argue for an
extension of May’s (2005) question: How might one live with(in) all relationships comprising
our social world?

1.4: Glossary of Terms

- Anthropocentrism: An approach to existence that emphasizes humans above all other
  entities.

- Becoming: Becoming describes the ongoing state(s) of confliction, fluctuation,
  uncertainty, and transformation (Jackson & Mazzei, 2012; Later, 2013). This includes the
  troubling of temporal demarcations and rigid boundaries seeking to bifurcate, categorize,
  and stratify non/humanistic historical entities.

- Entanglement: According to quantum physicist Barad (2011), entanglements “are not
  intertwinnings of separate entities but rather irreducible relations of responsibility
  […]there is no fixed dividing line between ‘self’ and ‘other’, ‘past’ and ‘present’ and
  ‘future’, ‘here’ and ‘now’, ‘cause’ and ‘effect” (p. 46). Entanglements do not adhere to
  boundaries and describe the inseparable and complex relationship(s) that exist across
  material, spatial, and temporal planes.

- Ghost(s): Refers to the invisible presence of (historical) ideas, memories, people, places,
  and matter(ing)s.
• Haunting(s): The act of engaging with ghosts.

• Inter/intra-action: While inter is defined as among or in the midst of, intra means from within. In a traditional sense, inter-action references connections that (might) occur by entities that originally maintain a sense of independence. When intra is applied to action, the relationship between constitutive entities bends and signifies the emergence of agency—the ability to act—from within (Barad, 2013, 2007). Throughout this inquiry, inter/intra-action signifies a continuum between independence and (re)emergence.

• Matter(ing): For Barad (2007), matter and meaning—matter(ing)—are “inextricably fused together, and no event, no matter how energetic, can tear them asunder” (p. 3). Matter(ing) attempts to represent/capture the multiplicity of being and becoming in the world by suggesting that it is a continuous process.

• (Re)Photography: Best defined as the juxtaposition to two images of the same subject taken at different points in time (Bae, Agarwala, and Durand (2010), through (re)photography, varying degrees of the past overlap, thus instigating multiple potentialities relating what was once, what is, and what might become. Further, and as Kalin (2013) reminds us, (re)photography offers a “hauntological orientation to remembering that has the potential to create a con/fusion of places and times, producing, circulating, and accumulating the messiness of memory so that there is never a last image or last time or last memory, but rather only a last in the flow of images, times, and memories—illuminating not the ultimate meaning, but a meaning for the time(s)” (p. 170).

• Temporality: Relating to the philosophical relationship between the past, present, and future. This study uses a conceptualization of temporality that makes a “distinction
between *time conceived as an object dimension of the world*, which is independent of the subject who perceives it, and *time conceived as a subject experience*, which is not independent of the subject who within that objective time” (Simão et al., 2015, p. xii, italics in original).

**1.5: Delimitations and Assumptions**

Whereas most of this inquiry was designed to take place during six sessions over a two-month period, there were unforeseen events (i.e., worldwide pandemic) that influenced the completion of this inquiry’s scheduled data collection. This change will be addressed in both Chapter 3 (Section 3.5.2) and Chapter 5 (Section 5.7). With regard to the actual focus group interviews, I attempted to maintain advocacy by facilitating each discussion in a way that “all voices can be heard and honored” (Lincoln & Guba, 2013, p. 78). While I address issues relating the impact of my role as a teacher in greater detail in Chapter 3 (Section 3.7.3), semi-structured focus group interviews allowed me the flexibility to prompt participants who were un/willing and un/able to un/articulate their experiences (Lichtman, 2013, Roulston, 2010).

Considering the temporal and constructivist nature of this inquiry, my assumptions regarding time and the construction of knowledge were of particular relevance. As such, this research followed a conceptualization of temporality that differs from time. Specifically, the suggestion that time is an objective construct and temporality is a subjective experience was embraced (Simão et al., 2015). With this being said, this research acknowledges that many (non-Eurocentric) cultures have different ideas relating to the (ghostly/haunted) in-between spaces of time and temporality that perhaps might expose alternative perspectives relating to
dis/connectivity\(^2\), temporality, and historical matter(ing)s. This idea is re-visited and further developed in Chapter 5 of this dissertation (Section 5.4).

Additionally, this inquiry is framed around my assumption that all people have (past, present, and future) ghosts/hauntings that influence knowing(s)/be(come)ing(s). While these ghosts/hauntings represent (past) experiences, perspectives, and relationships, this inquiry takes the position that they can be informed and thus shaped by social and material inter/intra-actions. In this way, knowing(s)/be(come)ing(s) are perpetual and transformative processes relying (infinitely) on shifting social and contextual conditions. To this point, this perspective suggests that there is no ultimate truth that can be exposed, found, or (af)fixed.

Within the specific context of this study, it is my assumption that engagement with each of the collections will include three other times after the initial engagement session. As the instructions for these out-of-class engagements encourage participants to take photographs of surrounding matter, it was my expectation that participants would do so and include them in their journal along with their artistic/textual responses. This assumption has particular relevance to future inquires and is discussed later in this dissertation (Section 4.4.2).

1.6: Theoretical Framework

This inquiry is underpinned by the following theoretical concepts: (1) hauntology, (2) photographic (re)production, (3) spacetimematter(ing), (4) temporal depth/thickness, and (5) presentism/eternalism. Whereas each concept is unique, I believe as arranging them as a framework presents a unique vantage point from which to think through/across the use of (re)photographs to explore temporal dis/connectivity.

\(^2\) Throughout this research, dis/connectivity is used to acknowledge/engage with the complexities and range of ways that students formed/conjured relationships to ghosts/hauntings and other temporal matter(ing)s. This is further explained in this chapter (Section 1.6.1) and addressed in Chapter 4 (Section 4.2.1).
1.6.1: Context of time. Conceptually, dis/connectivity is manifold especially within an educational context. While it is common for teachers/students to desire greater degrees of connectivity to school (e.g., content, context, discourse, personal relationships, and resonance) (Whitney et al., 2006), this study employs dis/connectivity in a way that purposefully attends to the developing relationship(s) existing between elements of space, time, and other surrounding elements and objects, or matter(ing)s. These relationships are subjectively and socially generated, thus remaining (perpetually) inescapable of in/consistencies and fluctuations (Lincoln & Guba, 2013).

Identifying and conceptualizing the relationship(s) between multiple (historical) actors, concepts, locations, and matter(ing)s can produce direct affectual and physical (re)actions (Alaimo & Hekman, 2008; Barad, 2007; Braidotti, 2019, 2013; Coole & Frost, 2010; Edwards, 2010). For some, visiting an old house can conjure traces of emotions related to the recollection of times past (affectual), whereas someone glancing at a time-tracking device might suddenly hasten their gait, keystrokes or voice (physical) as a reaction to time. From the perspective that time touches every aspect of our be(come)ing (Bender & Wellberry, 1991), all worldly matter(ing)s contain complex and entangled relationships. Despite Trouillot’s (1997) position that, “the past, or more accurately, past-ness is a position” (p. 15), during this study I situated my thinking in a way that puts the positionings of the past in close proximity to how intricate relationships of the future (be)come into being.

1.6.2: Haunting hauntology. Any ingression into hauntology should include Derrida’s (1974) idea of deconstruction. Deconstruction is an interpretive text-based approach that involves eroding of binaries and/or the privileging of one concept over the other. Embarking on a deconstructive journey involves bringing to light the (textual) moments where concepts begin to
betray themselves, thus gesturing towards the instability of words. For Derrida (1974), meaning is constructed through synchronic (tertiary words necessary to understand a concept) and diachronic (temporal conditions that shifts the meanings of words) connectivity.

In this way, Derrida (1974) suggests that making meaning is guided by one’s own personal ghosts/hauntings. To this point, traces (upon traces) of prior conversations, emotions, experiences, un/knowings, and readings (i.e., ghosts/hauntings) can influence how written concepts are cognitively processed. Further, Derrida (1974) aporetically stated that “there is no outside of text” (p. 158). Despite varying and conflicting interpretations of this axiom, I posit that this grammatical puzzle was intended to deconstruct the hierarchy surrounding communication as whole. Philosophers of the past have made the argument that spoken language is less circuitous (easier, quicker distance to reach signified from the signifier) than written language. I argue that Derrida not only rejects the idea that spoken, written, or gestured words should be stratified but that visual representations or other artistic means might better serve the purpose of capturing nuanced and abstract representations/expressions.

1.6.3: The Time is out of joint. Drawing inspiration from (re)appearances of Marxism, Derrida (1993b) conceived the neologism, hauntology as way of making sense of how traces (upon traces) of history/ies return and influence how people make non/sense of the social world. First appearing in his 1993 work Specters of Marx, Derrida suggests that all aspects of European life are and will continue to be haunted by Karl Marx’s socialist mode(s) of production, despite socialism being absent. Hauntology attempts to account for the in-between spaces of presence and absence and how these (ghostly) spaces (i.e., past history/ies, memories, inter/intra-actions) deserve to be acknowledged and explored (Derrida, 1993b).
From this perspective, hauntology is everywhere/nowhere and cannot be contained or limited to temporal conditions. With hauntology, conventional and fixed temporal markers (past/present/future) are collapsed, thus suggesting a conceptualization of time that is disjointed, unhinged, and incalculable. As such, a hauntological iteration of time and temporality does not capitulate to socially constructed markers and begs to be (re)conceptualized, (re)traced, and confronted within a historical context.

Hauntology offers two primary arrivals/departures relating to the rupture of anchored temporal demarcations (e.g., past, present, and future). The first references “to that which is (in actuality) no longer, but which is still effective as virtuality (the traumatic compulsion to repeat a structure that repeats, a fatal patter)” (Fisher, 2012, p. 9). This notion challenges epistemological/ontological certainty that reality and materiality are symbiotic, while essentially asking: Can something still touch us if we cannot touch it? The ghost is not limited to humanist subjects and can be applied to unfathomed (historical) actions, concepts, localities or matter(ing)s.

Secondly, hauntology refers to that which has yet to happen but that has concordantly already emerged with(in) an anticipated action or behavior (Fisher, 2012). Hauntological principles foster the possibility of epistemological/ontological uncertainty, despite “being mitigated by the [epistemological/] ontological certainty that the event happened in a certain way at a certain time” (Kleinberg, 2017, p. 1). Put another way, (historical) thoughts undergirded by hauntology are not hitched to the arrival of any fixed/free-standing truth(s) but rather, can be used to dis/connect to temporal entanglements of confliction, uncertainty, and fluctuation.

Hauntology offers a theoretical lens from which I can begin to pivot away from engaging with actions, behaviors, concepts, localities, and matter(ing)s in a non-sequential manner.
Thinking with Derrida and hauntology (re)centers a mindfulness of similar ideations within the context of how our own perspectives continue to be created, destroyed, reborn, and remembered. According to Derrida (1994), these (historically) temporal conditions are inseparable as “it is never possible to avoid this precipitation, since everyone reads, acts, writes, [and thinks] with his or her ghosts, even when one goes after the ghosts of other” (p. 139, italics in original). In this way, hauntology suggests that we are a composite of “ghost[s] of ghosts” (Derrida, 1993b, p. 138) that dis/connect us to everything around/inside us.

1.6.4: Ghosts in the machine(s). Visual images offer alternative approaches to expressing information and engaging with temporality. Photographs attempt to contain temporality with technology (e.g., photographic equipment, paper, printers, and visual display screen) and can be abstract, complex, meaningful, and misleading (Baudrillard, 1994/2004). Further, they can contain absent traces (upon traces) of social/cultural/political conditions that are significant to accurately understanding the narrative attempting to be conveyed. Understanding the relationship(s) between photographic matter(ing)s (e.g., equipment, photographer, and production methods) and subject is essential to critically engaging with and analyzing visual resources (e.g., (re)photographs) (Rose, 2016). Offering a perspective of the ways these invisible conditions are often overlooked in photographs, Baudrillard (1999) says,

> Between reality and its image, there is an impossible exchange. At best, one finds a figurative correlation between reality and the image. “Pure” reality—if there can be such a thing—is a question without an answer. Photography also questions “pure reality.” It asks questions to the Other. But it does not expect an answer. (p. 176)

From this viewpoint, seeing is dis/believing and suggests that interpreting (re)photographs requires imagination to think beyond what has been visually captured (Baudrillard, 1999; Rose, 2016). While social studies teachers are trained to imagine the source of the (re)photograph and
ways in which contextual information—which has disappeared from the photo—shapes how students create meaning with (in) each picture, the method of (re)photographic production is commonly overlooked. Baudrillard (1999) believed photography/images are unstable and involve a complex system of relationships—between equipment, light, movement, photographer, setting, and subject/object—that is essential to fostering intricate connections to visual representations.

(Re)photography added another dimension to this temporal interplay conjuring up multiple assemblages of ghosts/hauntings and matter(ing)s (further) complicating entanglements of time, temporality, perspective, and matter(ing). Rather than using a photograph to affirm an (assumed) truth, thinking with Baudrillard (1994/2004) and (re)photographs illuminated the complex nature of (re)photographs and the absent, yet reoccurring relationships that (re)shape participants’ interpretations.

1.6.5: Spacetime matter(ing). Spacetime matter(ing) is a theoretical abstraction that—through the connection of individual concepts (i.e., space, time, and matter)—values the relationships between various elements. As Barad (2011) suggests, by en/folding space, time, and matter(ing) into a relational concept, we can begin “to think about the nature of causality, agency, relationality, and change without taking these distinctions to be foundational or holding them in place” (p. 32). Spacetime matter(ing) cannot be contained temporally or materially and functions as a way to think about the constant changes and inseparability of space, time, and matter.

Barad (2010) argues that thinking spacetime matter(ing) presents an opportunity to embark on a journey that seeks to unsettle the dis/orienting experience of grappling with “the dis/jointed-ness of time and space, entanglements of here and now, a ghostly sense of
dis/continuity” (p. 244). This theoretical concept was helpful with engaging with (historical) dis/connectivity and helped me widen the (paradoxical) aperture of time, temporality, and matter(ing). Adding to this perspective, Soja (1989) says:

Time, space, and matter are inextricably connected, with the nature of this relationship being a central theme in the history of the philosophy of science. This essentially physical view of space has deeply influenced all forms of spatial analysis, whether philosophical, theoretical or empirical, whether applied to the movement of heavenly bodies or to the history and landscape of human society. It has also tended to imbue all things spatial with a lingering sense of primordiality and physical composition, an aura of objectivity, inevitability and reification. (p. 79)

Spacetime matter(ing) sees everything (e.g., im/materialities, encounters, non/humans, spatial considerations, etc.) as part of a process perpetually in flux of be(come)ing. From this perspective, “matter is a substance in its iterative intra-active becoming—not a thing, but a doing, a congealing of agency…[and] mattering is the ongoing differentiating of world” (Barad, 2001, p. 17). Put another way, from this perspective, agency is not something that can be mapped onto something or someone, rather agency is emergent from the inter/intra-actions and entanglements occurring between matter(ing)s (Barad, 2007).

1.6.6: Temporal depth/thickness. In 2019, Rydén explored preservation techniques relating to matter(ing) to learn more about how best to “maintain the memories of society” (p. 2). During this inquiry, Rydén (2019) compared the dis/advantages of digital and physical archives and revealed that all participating archivists demonstrated stronger and more complex relationships to the prolonged storage of material documentation. Rydén (2019) then leveraged these findings to theorize how physical matter(ing)s help people develop more intricate relationships to temporal moments. This concept, termed temporal depth, is defined by Bluedorn (2002) as being the “temporal distances into the past and future that individuals and collectivities
typically consider when contemplating events that have happened, may happened, or may happen” (p. 114).

Although conceptualizing the unknown (future) can be more challenging for people than reflecting on past occurrences, there is a symbiotic relationship (depth) between the past and future (Benford, 1999; Bluedorn, 2002; Hedstrom, 2010; Wilson, 2002). For individuals that can conceptualize, engage, and express moments of the past, correspondingly, possess the capacity to image future occurrences. Rydén (2019) is careful not to relate this to the ability to make more accurate predictions and notes that “temporal depth can also vary over time” (p. 5). Considering the problem expressed in this inquiry (Section 1.2.1)—a limited and anthropocentric aim of social studies is stymying students’ ability to connect (to) the past, present, and future—thinking with temporal depth was productive in underscoring the importance of past/future histories and how factors of the past (potentially) (re)shape dis/connections to future matter(ing)s.

As Deleuze (1989) suggested, “Time is not the interior in us, but just the opposite, the interiority in which we are, in which we move, live and change” (p. 82). Encasing this position within the conceptual notion of temporal thickness, Deleuze (1989) describes an iteration of the past that saturates the present and further leverages such entanglements into a (re)imaging of the future.

For Deleuze (1989), memory and nostalgia are manifestations of the past/present/what is to (be)come of future. To illustrate this notion of thickness or inter/intra-connectivity, Deleuze (1989) refers to the most prominent work of Marcel Proust (1992): his novel, In Search of Lost Time. Throughout, the protagonist reflects on his life and grapples with tensions stemming from a consciousness of how a loss of time has translated into a contraction of meaning. While trying to process information from the past, while existing in the present, a recollection occurs to him
that time was never lived but is nevertheless being relived as (un)controlled memories percolate his thoughts on a daily, monthly, and yearly basis.

Deleuze (1989) proposes that the past transcends the inner workings of consciousness and further, has ethico-onto-epistemological emanations outside the mind. Offering an advancement on the Deleuzian notion of temporal thickness and contradictions brought forth by memory, Al-Saji (2004) says:

The memory of the present is the virtuality that perpetually accompanies the present; it is the shadow that makes it an actual present by putting it in contact with the past. The past, therefore, need not be understood as an abyss, a remote and lost presence. As the memory of the present implies, the past is the invisible lining of the present perception, constitutive of the present instant. (p. 216)

This theoretical—albeit nuanced—approach to temporality helped me pivot away from a restrained conceptualization of time that views history as a successive, linear juxtaposition of time-points, events, and people.

1.6.7: Antithetical disruption(s). When engaging with discussions on temporality, philosophers tend to present the concepts of presentism and eternalism in an antithetical context (Kim, 2014). However, this inquiry situates presentism in a relationship with eternalism, as opposed to thinking with each in a contradictory and incompatible fashion. Presentism suggests that only the present is real, whereas eternalism believes that all elements relating to space, time, and matter(ing) are entangled and (forever) exist.

Presentism is the ontological belief that only matter(ing)s in the present can be referred to existing (Crisp, 2004; Hinchliff, 1996; Markosian, 2004; Zimmerman, 1996). This theoretical positioning privileges the present by rejecting the existence of the past and future. In short, something can only come/go into being within a (strict) relationship to the now. Presentists may acknowledge that James Baldwin existed at a point that is no more (past), but has gone out of
existence considering his lack of non-physical traits in the present moment. Further, from a presentist perspective, all (historical) matter(ing)s that once existed at a previous timepoint, will each in turn go out of existence at some point (Kim, 2014). Thus, presentism argues that while change(s) (of existence) have occurred, all that has changed is what could be considered (the) present.

Conversely, eternalism is the philosophical belief that all three parts (past, present and future) of time are equally real (Crisp, 2004; Hinchliff, 1996; Markosian, 2004). Whereas presentism is an approach to time that continually moves in a (linear) forward direction, eternalism denies the “objective flow of time and thus argue[s] that past and future entities exist just as present entities exist, albeit not now in the way present entities do” (Kim, 2014 p. 136). Although thinking in this way helped me to expose inter/intra-active relationships between temporal demarcations, like presentism, eternalism has its limitations.

Eternalism denies the open-ness/uncertainty of future becomings. Considering that each temporal marker (i.e., past, present, and future) contains equal substance, each are regulated by similar traits (Oaklander, 1998). Put another way, the future is as static as the past, and will become the present, regardless of free will. Critiques of this theoretical approach argue that against temporal conditions relating to (feeling of) change. For example, for an eternalist, events, emotions, and experience of the past, carry the same weight as those occurring in the now and that (will) come into being in the future. This approach reinforces temporal demarcations, albeit in a slightly different way. Rather than seeing traditional markers of time as being fluid, nomadic, and uncongealed, eternalism perpetuates ways that the standardization of time restricts how we conceptualize the notion of possibility. In turn, this places constrictions on what may (be)come of the future and how our nostalgia of the past (forever) fluctuates.
Despite the problematic nature of presentism and eternalism, when conceptualized as a singular (complex) concept—presentism/eternalism—the (contentious) relationship between the past, present, and future comes into focus. I acknowledge that presenting these terms as such—the ordering of presentism first, eternalism second—the present remains privileged over other demarcations (past/future), yet (still) exists in close relation to the past and future. Establishing a continuum between these concepts created a prism from which I was able to make non/sense of secondary students’ perspectives relating to un/known-ness, un/now-ness, and the complex way participants dis/connected to temporality and matter(ing) throughout this study.

1.7: Summary

In this chapter, I have presented an overview of this inquiry, provided temporal context, and stated a purpose, problem, and rationale. I also presented a glossary of key terms and laid out potential delimitations and assumptions factoring into (all) aspects of this inquiry. Finally, I introduced specific philosophical concepts that (theoretically) guided me throughout this research project.

Next, in Chapter 2, I map out the findings from reviewing literature relating to (1) the use of digital primary sources, (2) recomposing visual and digital temporalities, and (3) ghosts/hauntings in social studies. Broadly, results from this review of literature indicate that research conducted with (re)photographs was done so in a peripheral sense excluding any extended analysis of (temporal) dis/connectivity. As such, in Chapter 2, I also note how my research addresses the gap in literature by exposing secondary students’ dis/connectivity to temporally disjointed resources and how entanglements of space, time, and matter(ing) impact these (visual) engagements.
Chapter 3 describes the design of this research. Accordingly, the research questions guiding this inquiry are: (1) What does (re)photography expose about secondary students’ dis/connections to the social world? (2) How do students dis/entangle with spacetimematter(ing)s when exposed to (re)photographs?

To attend to these questions, this qualitative study will rely on visual methodologies—specifically photo-elicitation—and explore the ways in which students dis/connect to (re)photographs within the context of materiality/temporality. Data consists of observations, participant/researcher generated artifacts, and semi-structured focus group interviews. After the data was collected, I used a thematic analysis to analyze/interpret what was produced by the 21 secondary students participating in this study. This flexible approach allowed me to maintain a sense of responsiveness to the data corpus and cultivated a theoretical relationship informed by both research questions and aspects of literature that was reviewed.

In Chapter 4, I thematically present what was produced during this study. I discuss each of these themes and how they were used to develop overall findings in Chapter 5 while also offering recommendations, ideas for future research, and concluding thoughts.
Chapter 2: Review of Literature

This literature review focuses on: (1) the use of digital primary sources, (2) recomposing visual and digital temporalities, and (3) ghosts/hauntings in social studies. Due to the ubiquitous nature of ghosts/hauntings, this review of literature extends beyond the realm of social studies and includes research from various academic disciplines across the humanities including history, linguistics and language, literature, philosophy, and visual (digital) arts.

Considering the purposeful role primary sources play in social studies education (Brown, 1996; Cuban, 2016; Evans, 2004; Van Sledright, 2011; Weber, 2014), the amount of scholarly work that explores/interrogates their implementation is robust. For example, while reviewing literature that examined the fostering of historical thinking with digitalized primary sources, Tally and Goldenberg (2005) speculated that "using primary sources gives students a sense of reality and complexity of the past; the archives thus represent an opportunity to go beyond the sterile, seamless quality of most textbook presentations to engage with real people and authentic problems" (p. 3). However, despite this suggestion, one might argue—underpinned by my inter/intra-actions during this search—that upholding traditional practices associated with implementing primary sources is itself constricting and sterile.

While I did not limit my search for literature to specific years, all research located/evaluated in this review was published in English from the years 1952 to 2018. My findings revealed that research conducted around contemporary methods aimed at interrupting traditional pedagogical/methodological approaches of using primary sources is scarce. These
approaches are inclusive of, but not limited to comparing/contrasting, sourcing, contextualizing, corroborating, and using primary sources to encourage student writing.

 Coincidently, and perhaps ironically, the breadth of scholarly work on ghostly matters and hauntings specifically related to social studies education is virtually non-existent. Using Google Scholar (GS) and the University of South Florida’s (USF) online library—which is powered by the EBSCO Discovery Service (EDS)—I performed a search using the words “ghosts,” “haunting,” “social studies,” and “history.” While my GS search returned thousands of results, my inquiry into USF’s database yield zero responses. Sifting through the results from GS, I quickly discovered that many of the titles ensnared with my keywords used “ghost” or “haunting” in the title or amongst the keywords as a possible means of generating interest. However, I located a relevant example of ghosts/hauntings being applied directly to social studies research. This article appeared in the journal *Jewish Social Studies* and comprises section (Section 2.3.4) of this literature review.

 Research indicates that students describe the current iteration of social studies as shallow and boring (Chiodo & Byford, 2006; Gehlbach et al., 2008) causing (historical) disconnectivity (Barton & Levstik, 2011; Cutrara, 2012; Nuttal, 2013; Schug et al., 1982; Shaughnessy & Haladyna, 1985; Van Straaten et al., 2016). This includes students not seeing the value in studying history or how past events help orientate dis/connections, dis/engagements, and mis/understandings of, with, and to past, present, and future (historical) matter(ing)s (Barton & Levstik, 2011; Harris & Reynolds, 2014; Van Straaten et al., 2016). As such, this inquiry seeks to add to existing research by further (re)conceptualizing how digital primary sources—through the introduction of ghosts/hauntings and spacetime matter(ing)s—can be used in (secondary) education to think about, with, and through entanglements of temporality and materiality.
2.1: Digitized Primary Sources and Social Studies Education

Since its inception as a subject, social studies scholars, professionals, and educators have grappled with how best to connect students to historical content, perspectives, and matter(ing)s. Despite this contentious debate, most agree that content and purpose—in some different balance/form-compose the thrust of engaging, efficacious social studies education. Along this vein of thought, Schulman (1986) argues that teachers who embrace a disjointed iteration of social studies—one that disentangles content and purpose—lacks the agency, contextualization, and historical consciousness needed for compelling instruction. Further, Schulman (1986) posits that “the key to distinguishing the knowledge base of teaching lies at the intersections of content and pedagogy, in the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by students” (p. 13). From this perspective, history teachers should not only know history but also how to do history in a way that is mindful of non/humanist actors/localities/entities (Drake & Nelson, 2005).

While classrooms are traditionally text-based, visual images present social, historiographical, and culturally dynamic ways of approaching history (Berson et al., 2017). When primary sources are the images used, students are presented with opportunities to engage with historical entanglements. Traditionally, photographs constitute visual primary sources and are tethered to a fixed moment in time. Although implementing digitized primary sources can be challenging (Bass, 2003; Bransford et al., 2000; Perkins, 2003; Seixas, 1998; Stearns et al., 2000), recent technology has allowed for an increase in accessibility/engagement of digitized primary sources that interrupts traditional temporal and pedagogical approaches to implementation.
2.1.1: Using digitized primary sources to teach history. As an educational discipline, social studies is multidimensional and consists of critically thinking, analyzing, and interrogating past perspectives, localities, relationships, and moments in time. While social studies curricula continues to be grounded in/around text-based materials, images present a method for promoting engagement, (ghostly) entanglement, historical inquiry, and fostering discourse (Berson & Berson, 2016).

However, merely attempting to have students engage with visual representations of historical occurrences—by displaying, using print material, or directing a web-based research task—is not enough. In 2014, Schocker investigated how images could be utilized to “increase the level of critical thinking and to inspire deeper levels of historical understanding” (p. 421). Using an overhead projector to display images from her computer to guide an honors course, “Women in Modern History,” Schocker (2014) discovered that reflexive tendencies from social media engagement effect how her college students consumed images of women she displayed. When an image was first displayed, Schocker’s (2014) students would glance at the picture before almost immediately disconnecting from it. To counter this, a strategy called “close looking” (Woyshner, 2006) was employed, aimed at (re)centering student focus/engagement by allotting “a minute or so without commenting or making assumptions, attuning to visual details” (Schocker, 2014, p. 423).

Through this delay and temporal pause, students converted basic observations into inferences about localities/postures/identities. Schocker (2014) noted that this fundamental—and often overlooked—step in the image analysis process “clearly led to students’ motivation to both read and participate so willingly” (p. 423). Once students became engaged with the image—
through the close looking strategy—cognitively, a sense of preparedness for a more in-depth critical analysis emerged.

To explicate secondary students’ conceptualizations of women, Woyshner (2006) used another visual strategy called “juxtaposition” to create a “sophisticated and complex understanding of women in the past” (p. 359). After showing her class a photograph of Amelia Bloomer, Woyshner (2006) revealed two other sketches of Bloomer and asked students to compare the three images. Through this exposure to several different renderings of the same woman, students began to reflect on cultural/social depictions of gender and equality. This process also exposed students to the notion of sourcing and prompted questions about the biases/intent/perspectives of each photographer and illustrator.

Both strategies center on observation and contribute to the building up of analytical skills required for elevated cognitive dialogue about visual images. To instigate further analytical discourse, Woyshner (2006) showed students an image of men and women and asked students to reflect on how the meaning of the image shifts if people’s roles were reversed. This strategy—deemed “trading places”—provoked a “complex awareness of women in history…that focus[es] on gender [roles] and representation” (Woyshner, 2006, p. 361) through conversation. In asking students “How would you feel about switching the genders in the images?” (Woyshner, 2006, p. 362) and the historical implications of doing so, Woyshner (2006) found that trading places disrupted how students perceive, interpret, and understand power structures (patriarchy), identity (gender roles) and temporality.

By emphasizing digitalized images as a means of teaching history, students start to develop critical/analytical skills from which responsible and meaningful dialogue(s) can emerge. Ultimately, Schocker (2014) found that using images to supplement readings and class
discussions “created a stronger starting point for thoughtful class discussions, added complexity to student writing, and enhanced peer interactions as students put together group presentations” (Schocker, 2014). Unfortunately, in many cases, teachers stifle students’ inter/intra-actions with resources and each other by telling them the meaning of each image displayed (Drake and Nelson, 2005). However, when complex strategies that complement each other are utilized, interest becomes activated and can convey a nuanced conceptualization of history that promotes connectivity (Schocker, 2014).

When a confluence of engaging dialogue promoting strategies conjoins with digital interactives—that are aesthetically attractive—a “enhance[d] understanding of concepts or events” occurs (Berson et al., 2017, p. 105). The internet hosts an endless stream of resources that use primary sources interactively. A review of resources specifically suited for exploring historically temporal demarcations can be found later in this chapter (Section 2.2).

2.1.2: Using visual (historical) methods in K-12 classrooms. Framing an argument for the implementation of visual methods, Mattson (2009) declares that the “task of the history teacher, after all, is not simply to teach skills and facts or to prepare students for standardized tests, but also to help students develop intellectual habits of mind that will enable them to reflect upon their lives and their world in which they live, as well as to face down the big challenges that they will encounter as adult residents of a democracy” (p. 18). Pushing this idea further, I would add that to achieve this, a sense of dis/connectivity between non/humanist matter(ing)s of the past, present and future must be fostered. While her chapter focuses on the use of visual methods, Mattson (2009) contends that before visual methods can be successfully introduced, students must be able to: (1) frame historical questions, (2) critically read primary sources, and
the engage in broader debate about the meaning of the past and form opinions of their own about these histories (Bain, 2005; Holt, 1990; Van Sledright, 2002).

According to historian Brown (2004, 2003), history as a field continues to cling to an anti-ocular bias and has fortified an innate hierarchy of text (written) over the “presence of visual evidence” (p. 8). While careful not to generalize all historians, Brown (2003) calls for the further development of visual methodologies that confronts/interprets visual sources that might unveil “new things about the past” (p. 21). It is not lost on Brown (2004, 2003) that such a pivot requires an advanced pedagogical approach underpinned by theories of visual-ness. I am inclined to agree with the cultural theorists Peters and Mergen (1977) that if leaders in education desire to fully take advantage of visually digital sources in classrooms and further develop our students critically historical thinking skills, then we must learn how to “ask new [and unexpected] questions” (p. 284).

2.2: (Re)Composing Visual and Digital Temporalities

As Currie (2007) prompts us, “time is a universal feature of [any] narrative” (p.2). Perhaps history can be thought of as a patchwork of narratives, loosely stitched together by temporal threads that beckon historians, educators, and students to tug. Be(come)ing conscious of the role that time and temporality plays in our affectual, cognitive, emotional, and physical development offers “indispensable insights into history and ideology of modernity; the temporal political of nationalism, colonialism, and racial oppression; the alternate timescales of environments crisis and geological change; and the transformations of life and work that structure poststructuralist and postindustrial society” (Martin, 2016, p.1).

While the National Council for the Social Studies (NCSS) states (hauntingly) in Theme 2: Time, Continuity, and Change, that goal of social studies is to promote “experiences that
provide for the study of the past and its legacy” (NCSS, 2010), little research has been conducted around exploring that ways that fluid approaches to temporality impact how teachers/students dis/connect to various (worldly) elements.

2.2.1: Temporalizing humans and technology. Timothy Barker (2011) defines a user of digital technology as someone who "comes into contact with the tools and aesthetics of digital technologies" (p. 97) in an interested/engaged manner. The digital tool is not static, and once a user becomes engaged, the way the user sees, hears, acts, and communicates becomes inextricably linked to the technological lens they are engaging. As such, and according to Barker (2011), the “technology becomes fundamentally temporal as it intervenes in the processes by which we make meaning of the world” (p. 97). Digital platforms can serve as a conduit for exploring the fluid intrastititiality of space, time, and matter(ing).

To illustrate this potential, Barker (2011) unravels the workings on a paradigmatic online experience titled Can You See Me Now? by Blast Theory (2001). This digital interactive relies on both virtual space and performative human measures. Can You See Me Now? is a multi-perspective game that unfolds across a multiplex of temporal/spatial/digital boundaries. Living “players” move around physical streets while attempting to catch the digital presence of online gamers. The human players are a part of a team, who communicate with “gamers” via Global Positioning System (GPS) trackers, walkie-talkies, and hand-held digital screens/maps of the digital city.

By transposing ethico-onto-epistemological considerations across multiple planes, Can You See Me Now? troubles the relationship between the physical(ly) and temporal(ly) present, while harmonizing with Deleuze and Guattari’s (1987) theory that time and space is dissymmetrical and should be thought of as limitless. Despite lacking direct social studies
educational ambitions, *Can You See Me Now?* instigates a possibility of what may become of social studies education; a student experience that allows for non/metaphysical and digital interactions between with historical places, people, and events at various temporal (dis)junctions. While this technology (presently) remains unavailable for implementation in social studies classrooms, there are other examples of digital interactives that embrace various iterations of (re)photography as a means for engendering student thinking about historical intrastitiality and temporal boundaries.

**2.2.2: (Re)Imaging history with (re)photography.** In 2016, Berson and Berson argued that "history is not relegated to remote and far-away places; rather, it happened in our own neighborhoods and backyards" (p. 113). As educators continue to search for pedagogical methods that resonate with students and extent out into the social world, (re)photography encourages place-based exploration that reinforces the idea that the “presence of the past [lies] in the present” (Kleinberg, 2017, p. 3). While (re)photographs depict a specific place, they can be used in a way that prompts thinking about how historical entanglements are not limited to the events, actors, and localities visually captured. Rather, these resources suggest—through varying moments of time—that our perceptions of the present have a past and an (enduringly) undetermined future.

Although the creation of (re)photographs is a challenging process that is dependent on the (re)photographer’s proclivity for error, even an imprecise dyad of (re)photographs can assist with thinking about how the depicted subject has (not) changed over time (Berson & Berson, 2010). When these types of images are used, “teachers may help students visualize the layers [(upon layers)] of history under their feet” (Berson & Berson, 2016, p. 115). Investigating the
transformation of (historical) locations also illuminates possibilities for student inquiries into the role non/humans play in transforming the environment.

2.2.3: (Re)Photographic presence. According to Crane (2013), in a pragmatic sense, photographs are commonly associated with fixed glimpses into the past. However, to make this assumption, a consciousness of the space/time continuum must be present. Crane (2013) acknowledges that (for most) ideations of space/time—relating to photographs—includes the position that the past is separate from the present. Despite this, Crane (2013) offers the notion that historical photographs can be used to disrupt the binary approach to theorizing about space/time. Crane (2013) suggests:

Unlike any documents and artifacts, historical photographs uniquely lend themselves to a historical gaze that renders them present in a universalizing, familiarizing, and ultimately objectifying manner. Viewers of historical photographs may feel that they recognize photographic subjects or landscapes, built environments, and assortments of objects even if they have never seen these before, in ways that suggest but do not require historical translation. (p. 63)

From this viewpoint, every historical photograph offers more than a simple reflection of the past. Photographs contain various (ghostly) elements of the past—presence—that can be discernable, provided attention be given to the fluidity of temporal boundaries. As such, perhaps social studies teachers/students would benefit from pivoting away from the stance that historical photographs are fixed moments in time. Instead, by considering historical photographs to be pauses in time, they can be temporally interrogated backwards and forwards. Through the investigation of a photograph’s (in)formal elements, teachers can introduce the notion that every historical image contains aspects that are “inextricably entwined in their representational capacity” (Crane, 2013, p. 63). This also includes using (re)photographs to discuss what is not seen (yet), what (still) remains of the past, and what is yet to (be)come of the future.
2.2.4: Using digitized (re)sources to teach history. While using a digital application allowing for viewers to toggle or *slide* along two photographs, Ryan (2004) instigated a sense of time and change about the city of Boston (Figure 1).

![Boston Park Bench 1937/2004](Image)

Figure 1. *Boston Park Bench 1937/2004*

She took two photographs—from fixed points at different eras—and juxtaposed them together. Viewers have control of a “slider” and can unveil sections of one photograph while simultaneously veiling parts of the other. In doing so, viewers' gaze is directed into a similar space that moves forward and backward in time, thus promoting awareness of how history *was* and *is* while also allowing for considerations to think about what *will be* in the future. Many of the images decenter human actors of the past and allow for attention to be paid to non/humanist (living) historical entities (e.g., land, buildings, flora and fauna).
While these juxtapositions promote inquiry about time and change, they are limited in how they frame historical narratives with a before and after posture. Interestingly, Levene (2015) implemented a similar concept with his project *American Civil War Then and Now*, with dramatically different results (Figure 2). Using a different variation for the slider concept, Levene explored physical conversions that have occurred to (in)famous Civil War battle sites.

![Figure 2. Sudley Springs 1862/2015](image)

When the slider is moved across the screen, the subjects contained in each image—which, through transposition and (re)photography—begin to shift and bend in a temporal sense. The viewer has the ability to stop the slider at various points and witness the blending of the two images. Thus, temporal contradictions begin to fold and fluctuate, revealing entanglements between spacetimematter(ing)s.
(Re)photography is not limited to the demarcations of before and after. In its prime, Lewis Cass Technical High School served one of the largest student bodies in the Detroit area. However, due to changing social, economic, and industrial factors, the school was abandoned in 2005 before ultimately being demolished in 2011. Although the school has since been reconstructed in 2013, Detroiturbex.com sponsored a (re)photography project aimed at exposing temporal disjunctions from the time it was populated until it was vacated. This project, Cass Tech—Now and Then, transposed photographs of two different time periods—populated and abandoned—to demonstrate aspects of Detroit's physical and social deterioration. For instance, a small(er) picture of students working in the yearbook room during the 1980’s is transposed over a larger photo of the school's dilapidated space in the year 2012 (Figure 3).

Figure 3. The yearbook room has suffered especially badly c1980/2012
While the images are discernably from separate eras, they are harmonized spatially and provoke the consideration that something spirited occurred here despite the decaying surroundings. Along with these composite (re)photos, the Cass Tech—Now and Then gallery includes several depictions of former students seamlessly blended into a photograph of the school’s crumbling theater (Appendix I). The presence of Cass Tech’s former students interrupts demarcations of time, thus provoking an ethico-onto-epistemological (un)certainty about what could have happened in this location and when. Warping ontological certainty, the Cass Tech collection of images challenges the position that specific events unfolded at places within a fixed temporal construct.

Teeuwisse (2014) further troubles temporal and historical boundaries through the juxtaposition of ghostly soldiers from World War II onto contemporary photographs of the original location (Figure 4). In her project, Ghosts of War, soldiers and commoners haunt present-day streets, corners, buildings, and parades. Teeuwisse (2014) creates this effect by transposing black and white transparent people over photographs taken in color.

Figure 4. Street Corner c.1939/2014
Despite drawing attention to past persons/actions (ghostly matters) this instigation of temporal inquiries is limited. In the (re)photographs, privilege is given to the present, by way of color and weight. Teeuwisse’s (2014) ghosts provoke both historical intrastitiality and inter/intra-action by presenting (visually) an ontological im/balance between ghosts and their modern setting. In turn, the presence of the ghosts is not mitigated by a manifestation of historical absence but instead introduces a blurring of temporality that could foster exciting, nomadic questions about time, temporality, continuity, and dis/connectivity in a social studies classroom.

2.3: Ghosts/Hauntings in Social Studies

Research that utilizes ghostly ideations of history is sparse. However, I located several pieces of literature relating to ghosts/hauntings that have implications relating to teaching/learning social studies.

2.3.1: Haunting history. Dis/connecting hauntological implications with entanglement(s) of history, I (re)turn to the work of Ethan Kleinberg (2012) and his reference to Franz Kafka’s (1952) story about the Great Wall of China. In the story, the narrator recounts the process of how the wall was built:

[G]roups of about twenty workers were formed, each of which had to take on a section of the wall, about five hundred meters long. A neighboring group then built a wall of similar length to meet them. But then, afterward, when the sections were fully joined, construction was not continued on any further at the end of this thousand-meter section. Instead, the groups of workers were shipped off again to build the wall in completely different regions. Naturally, with this method many large gaps arose, which were filled in only gradually and slowly, many of them not until after it had already been reported that the building of the wall was complete. In fact, there are said to be gaps which have never been built in at all, although that's merely an assertion which probably belongs among the many legends which have arisen about the structure and which, for individual people at least, are impossible to prove with their own eyes and according to their own standards, because the structure was so immense. (pp. 226-227)
Using hauntology as a theoretical guidepost, Kleinberg (2012) engages metaphorically with Kafka’s (1952) story in a way that explains the inter/intra-connected relationship between the past, the present, and what is to become in the future. In thinking with hauntology and Kleinberg (2012), we can ask: (1) What if the wall was never fully completed? (2) What if the accepted belief of the people was that it had been completed, but that the missing sections were destroyed or eroded? (3) And, what if a later generation of people tried to "restore" the missing sections—under the assumption that they had been destroyed—using the original materials that were used on the physical segments of the wall that never actually existed?

With these questions and the work of Kleinberg (2013, 2012) we are prompted to consider an adaptation of history (past) and future (what will become) that is predicated on physical and theoretical traces ephemerally transfixed to the present. In this way, how we think/perform history/ies is not limited to matter(ing)s but rather, must account for the inter/intra-relationship(s) between cognition, (perceived) reality, and matter(ing)s. In summary, when we engage with the past, we do so "by going back to where we've never been" (Kleinberg, 2012, p. 115). Moreover, Kleinberg (2013) suggests that although historians acknowledge a sense of epistemological ambivalence encompassing how humanity cooperates/detaches from the past, there also is ontological credence built upon demarcations of time.

Traditionally, “orderly boundaries and lines by which we conventionally think about the relationship between past and present and thus the way we “do” history” (Kleinberg, 2017, p. 1) are limited. However, between certainty and uncertainty, there lies a (ghostly) space that interrupts and un/settles traditional approaches/perspectives of temporality. Due to the accepted belief that the wall was completed, in essence, the missing or ghost section of the wall became real in the minds of the people, despite never existing at all. Social studies educators can consider
Kafka’s (1952) anecdote of the Great Wall as an example of how conceptualizations of temporalities—in this sense, through matter(ing)s used for construction of the wall— influence ethico-onto-epistemological possibilities and the role perception plays in investigating historical matter(ing)s.

Further, Kafka’s (1952) tale can be used to think about how gaps in the past impact how educators/students can possibly attend to NCSS’s theme of time, continuity, and change, which haunts this proposal. While wading into these “brackish ontological waters” (Runia, 2006, p. 308) maybe terrifically inconvenient, Kafka’s (1952) story offers a version of history that can be folded, unfolded, and refolded in a manner that interrupts fixed checkpoints of space, time, and matter(ing). In short, The Great Wall can be taken as an (textual) example of the entanglements that exist (historically) between spacetimematter(ing)s.

2.3.2: To scan a ghost. Noting how technology has influenced the growth/development of media, Gunning (2007) questions the very nature of what media is trying to accomplish. While many may agree that technologies are conduits for communication, Gunning (2007) suggests that media-related technological innovations offer something much more. Rather than merely serving as a "transparent channel of transmission" (Gunning, 2007, p. 97), Gunning (2007) argues for an expanded (re)conceptualization of ways that media can be consumed in an ethico-onto-epistemological sense. Specifically, Gunning (2007) asks: “What is it that mediates between the seen and the seer—what pathways do vision and the other sense take? —rather than being the mere vehicles of transmitting messages and meanings?” (p. 97).

In his essay, Gunning (2007) reflects on the history of and (common) ways ghosts have been discredited and labeled as un/timely. Despite this acknowledgment, Gunning (2007) believes that ghosts/hauntings contribute to the formation of concepts that can expand
epistemological boundaries concerning modern media consumption. Specifically, Gunning (2007) argues that “the ghost has emerged as a powerful metaphor in recent literary studies, cultural history, and even political theory” (p. 98) and can be used dialectically to explore both what is visible (e.g., present im/materialities) and invisible (e.g., past im/materialities and future becomings).

2.3.3: Schoolyard ghosts. Reflecting on what she describes as a “nagging presence,” Ewing (2018) explored elements of love, loss, and institutional mourning related to the closure of schools in/around her childhood neighborhood of Chicago. From this perspective, Ewing (2018) defines institutional mourning as being “the social and emotional experience undergone by individuals and communities facing the loss of a shared institution they are affiliated with—such as a school, church, residence, neighborhood, or business district—especially when those individuals or communities occupy socially marginalized statues that amplifies their reliance on the institutional or its significance in their lives” (p. 127). Just as the results of a school closing can be devastating to a community that “leaves an indelible emotional aftermath” (Ewing, 2018, p. 127), Ewing’s (2018) work serves as a reminder that failures to confront/undertake rather than—at best—acknowledge, and reconcile (with) past (non/human) hauntings are equally as problematic/dangerous, especially for communities’ whose history/ies and perspectives have been (historically) belittled/diminished. Discussing factors that contributed to the closure of his high school, one participant Ewing (2018) spoke with said:

When you take over, when you take over a ‘hood—because the people that lived [the history] aren’t going to live forever. The people that actually experienced that, lived that. And as you’re getting older and you’re listening to these stories at some point you still gotta move on and you can’t—you’re not going to remember everything your parents told you. So that’s how you get black history to go away. (p. 129)
Just as allowing for the intentional deterioration of physical buildings is one way to control the history/ies of (historically) marginalized groups, failing to conjure traces (upon traces) of social injustice and (cultural/ecological) inequity causing the schools to close further perpetuates the stratification of the past, thus subjugating what it to be(come) of the future. Furthermore, engaging with ghosts/hauntings, or as Ewing (2018) calls them ghosts stories, can serve as a powerful modality of disruption/noncompliance/resistance. Specifically, Ewing reminds us that “Ghost stories serve as an important counter-story; a ghost story says *something you thought was gone is still happening here*; a ghost story says *those who are dead will not be forgotten*” (p. 154, italics in original). Despite adjudicating conditions (e.g., white supremacy, heteronormativity, ableism) governing which histories are conjured/valued in society, there is no negating the idea that “something, some, is still [(t)]here...despite all [enduring] attempts to eradicate us” (Ewing, 2018, p. 154) through misdirection, misinformation, and mismanage(s) of the (physical) past.

### 2.3.4: Ghostly perspectives

Jonathan Schorsch (2003) frames his essay on ways in which Jews and Germans conceptualize the past by discussing how the notion of haunting can be used to help those in the present recognize/empathize with those that have suffered collective trauma in the past and how this trauma continually affects identity formation for both German and Jewish people. To do so, Schorsch (2003) leans into Gordon’s (1997) perspective that ghostly haunting(s) involves “that special instance of the merging of the visible and the invisible, the dead and the living, the past and the present” (p. 24) to unpack these ambitions.

For past, present and future Jews and Germans, the suffering endured during the Holocaust does not adhere to binary points in time. The memories of this horrific epoch possess agency and will—I argue forever—continue to haunt people, places, environments, and other
matter(ing)s beyond the physical departure of non/human entities directly impacted. Perhaps the
dehumanizing pain and suffering that was, is, and will continue to be endured is best categorized
as being forever entangled, inter/intra-connected, and omnipresent. Schorsch’s (2003) article
uses examples—both Jewish and German—of confictions that (present) people are having with
reconciling the past events of the Holocaust.

Possibly the best illustration of this, is when Schorsch (2003) engages the question: “Can
Germans become Jews?” According to Stern (1996), Germans have been “walking on eggshells
in unspoken deference to the tragic history of the children, relatives, and coreligionists of their
victims who now live in Germany in growing numbers” (p. 82) leading to the continued anxiety
of a “generation of Germans overly burdened by a crime they did not themselves commit” (p.
82). Contributing to ways in which social studies educators can operationalize ghosts/hauntings
and spacetimematter(ing)s to foment temporal dialogues—challenging binary conceptualizations
of time, space, and continuity—is a long-term goal for my research, including the future
tumblings into uses of (re)photographs with elementary students, the conjuring of ghosts in
(local) physical spaces, and interrogations into the mastery over how history/ies become
demarcated (Section 5.7).

2.4. Summary

Despite a healthy body of research on primary sources in social studies education,
research aimed at disrupting temporal demarcations is sporadic. This review of literature
identified and connected a range of texts across multiple academic disciplines. Despite the
limitations of this research, the literature reviewed for this inquiry continues to whisper to
(teacher) educators/researchers for further exploration into entanglements of visual resources and
matter(ing)s of temporal discord.
While the essence of this inquiry involves rupturing (temporal) binaries through the (theoretical) provocation of ghosts/haunting, (re)photographic production, spacetimematter(ing), temporal depth/thickness, and presentism/eternalism, it also includes inter/intra-connectivity. I posit that this review of literature is a demonstration of how concepts are heuristically formed with, across, and through various educational disciplines. Social studies education is manifold by nature and is an appropriate space for the interrogation of relevant and rigorous (historical) ideations. Further, and as Helmsing (2014) reminds us, social studies “enable[s] students and teachers to examine and erode dichotomies, such as us/them, inside/outside, individual/collective, here/there, and private/public… [which are] often constructed, deconstructed, and reconstructed through emotional and affective forces” (p. 128).
Chapter 3: Methodology

To attend to the research questions guiding this inquiry, this study used visual methodologies—specifically (re)photo-elicitation—and a thematic analysis. Data was collected from observations, participant/researcher-generated artifacts, and semi-structured focus group interviews. Participants were recruited from one of my Global Perspectives courses at a secondary school in Northwest Florida. Along with expounding upon each methodological decision that was made, this chapter will provide research alignments, a brief overview of the development of visual methodologies, establish the protocol for students’ engagements with four collections of (re)photographs, and reveal how data was collected and (thematicaly) analyzed. This chapter concludes with ethico-onto-epistemological considerations and a summary.

My arrival at this research approach, analysis, and question involved many departures. Although visual methodologies originally inspired this project, throughout the design process I grappled with how to best to ascertain students’ conceptualizations of temporal disjunctions and matter(ing)s. I considered several different approaches—including action research and post-qualitative methodologies—but ultimately learned that such approaches conjured methodological/theoretical tensions inciting cognitive dissonance. Whereas I believe an action research approach over-emphasizes the role of the researcher in the inquiry process, a post-qualitative approach was not (temporally) conducive to working with my own students. In turn, I ultimately employed visual methodologies and analyzed what was produced with a thematic analytical approach which provided me with a balanced and flexible design best suited for this (social) inquiry.
3.1: Research Alignment(s)

This research is aligned with the constructivist paradigm. Specifically, the idea that knowledge is socially constructed and reality is a shifting multiplicity that “is stretched and shaped to fit purposeful act[(or)]s” (Schwandt, 2015, p. 236). All elements around us contribute to our sense of knowing/be(come)ing and are dependent on various interpretations and contexts. For instance, while several people may agree that bricks are units of matter(ing) used to construct something, others may possess contextual information relating to the dehumanizing process and marginalized groups exploited during their creation. In this way, this study rejects the notion that there is a singular truth to be discovered, thus epistemology and ontology are nuanced and relative to each individual (Lincoln & Guba, 2013). Considering the (re)photographic context of this inquiry, perhaps each engagement in the world can be best described as a filtered/(re)constructed focusing, dependent on the (shared) experiences and remembrances of each individual act(or) (i.e., ghosts/hauntings).

3.1.1: (Re)Constructing knowledge. According to Lincoln and Guba (2013), these moments/(re)constructions “are the end products of individual (and sometimes group efforts) at sense making, and hence they are inherently subjective” (p. 47). Following this perspective, a constructivist approach to knowing/be(come)ing is in a constant state of flux, endlessly shifting and being (re)constructed in accordance to (re)occurring inter/intra-actions (i.e., involvements and co-constitutive relationships with the worldly elements such as ideas, flora, fauna, memories, people, and places). Despite this, this research adopts the mindset that—in some instances—these social constructions may co-exist in a dormant state or rather, may remain unarticulated. Put another way, it is possible for a construct to exist despite its holder being unaware of its (ghostly) presence (Lincoln & Guba, 2013). With that being said, social spaces reveal
possibilities for the (re)construction of (re)new(ed) meanings that in some cases, bring into focus the traces (upon traces) of beliefs/memories/perspectives.

Additionally, the advancement of (re)new(ed) knowledge is governed by context and “advanced by continual testing by additional experience, by the assimilation of new experience (which may be vicarious), or by mental manipulation of primitive constructs or constructions into new forms which need not necessarily reflect experience (creation)” (Lincoln & Guba, 2013, p. 55). To this point, knowing/be(come)ing is not the result of years (upon years) of acquiring information but rather a constantly (d)evolving assemblage of inter/intra-actions that can be interrogated, confronted, modified, and absorbed/forsaken. Within the context of constructivism, knowing/be(come)ing is the seeking out of (re)new(ed) social opportunities to de/re-construct existing perspectives concerning the social world.

3.1.2: Act(s) of thinking. It is perhaps conceivable that the act of thinking is a pre/requisite for undertaking any aspect of inquiry. Despite this, according to Deleuze (1994), the performance of thinking is commonly overlooked “because everybody naturally thinks that everybody is supposed to know implicitly what it means to think” (p. 31). Furthering this thought, Hein (2017) suggests that authentic thinking does not occur unless “we attempt to think that which is unrecognizable, that which is the most difficult to think” (p. 656). When we begin to challenge what we think we know or what is possible, (re)new(ed) and unestablished spaces for learning/knowing/be(come)ing begin to (re)surface.

The inter/intra-act(ion) of thinking/thought therefore is in constant state of transition, in which temporal demarcations do not apply. From this perspective, the past invariably saturates future thoughts while the present consists of contradictions between both past(s) and future(s). Further, thinking is a process of knowing/be(come)ing and must account for temporal
considerations of the self. Put another way, my thoughts are the result of multiple (ghostly) inter/intra-actions with experiences, matter(ing)s, and perspectives of both past and present (remem)be(r)ings of the future.

3.2: Visual Methodologies

The usage of visual methodologies concerns (theoretical) approaches to interpreting/understanding components of visual culture or profusion of ways that the visual connects to social life (Rose, 2016). As with any methodical approach to research, there are multiple theoretical approaches to engaging with divergent framings of visual matter(ing)s (e.g., Adler/tourism, Foucault/surveillance, and Baudrillard/photography). Considering the theoretical framework outlined in Chapter 1 (Section 1.6), my use of visual methodologies during this inquiry was guided by posthumanist and poststructuralist approaches embracing the idea that seeing is dis/believing. Before I explain this decision, I will first provide a brief overview of the development of (photography-based) visual methodologies.

3.2.1: Anthropological influences. Although visual data has an extended history within the context of research that dates back centuries, this section is intended to provide a brief overview of the (modern) development of visual methodologies within a sociological context relating to photography. As such, the years between 1903 to 1915 marks a time of significance in the field of sociology (Heath et al., 2010; Moritz, 2011). During this time, *American Journal of Sociology* published a string of articles that used photographs or illustrations as a means of evidence. However, these publications quickly drew the ire of the scientific community and were labeled as unsubstantial presentations of objectivity (Becker, 1981; Bohnsack, 2008). Not long after these objections, in 1916, photography (briefly) disappeared from sociological research and
was replaced by technical representations of information (e.g., charts, graphs, and tables) deemed more valid (Collier, 1967; Schnettler, 2013; Starsz, 1979).

The potentiality of photography as research method reemerged in 1929 with the publication of German photography August Sandler’s collection of portraits, *The Face of Our Time*. In this book, Sandler used photography to *visually* present the concept of social stratification across Germany. This project relies on the power of each image and only includes a truncated caption that identifies the subject’s social status and/or profession (Schnettler, 2013). Explaining this approach to photo-documentary, Sandler said,

> With the help of pure photography it is [(im)]possible to create images that document the people in a genuine way and with their [in/]complete psychology. I started from this principle after acknowledging that I could create some real[istic] pictures of people, to produce a true mirror of the time in which they live (Heiting, 1999, p. 22).

Regardless of if Sandler believed his images were “real” or “mirrors”, the purposeful decision to present them as an assemblage gave each photograph an additional layer of context, fostering (re)new(ed) possibilities of interpretation/meaning (Becker, 1981; Starsz, 1979). A decade later, *The Face of Our Time* would inspire a photo-documentary project in the United States aimed at “establishing visual sociology as an independent and novel discipline” (Schnettler, 2013, p. 44).

**3.2.2: Ameliorations.** In 1936, Agee and Evans experimented with ways in which anthropological methods could be paired with photography. Specifically taking an ethnographic approach, Agee and Evans set out to collect visual data on lives of people living in rural areas across America. Before taking photos of people, Agee and Evans spent extensive time living with their subjects and gave strong consideration to the background, lighting, and positioning of the camera. These factors undergirded Agee and Evan’s (1936) attempt at exposing facets of people’s daily routines, through their subject’s point of view. While the theoretical ghosts of this
inquiry may contend the impossibility of this, Agee and Evan’s (1936) work titled *Let Us Now Praise Famous Men*, would inspire a thrust of photographers seeking to (ephemerally) capture temporal moments of advancing and retreating manifestations of social change.

Recently, Tinapp (2005) has built upon the foundation set by Sadler, Agee and Evans by hermeneutically using photography to document Cuban cultural/social changes. While living in Cuba, Tinapp “emphasized an emic point of view by asking her informants to themselves choose the domestic and professional scenes in which they wished to be portrayed” (Schnettler, 2013, p. 45). By including her subjects in the selection process, Tinapp (2005) further exposed the importance of perspective when engaging with photographs. While this approach was intended to reveal a closer, perhaps more accurately-complex relationship between the photograph, subject, and social factors, Tinapp’s (2005) (past) approach was productive in thinking about the (temporal) in/stability of (re)photographs.

These projects serve as examples of how visual representation(s) in the form of photography—underpinned by anthropological/sociological methods—could be considered data. Visual methodologies exploring various theories and practices of engaging with visual data, such as photographs, rapidly developed during the 1980’s. During this time, journals began publishing visual methodological work, conferences were held, manuals written, and universities offered courses designed around teaching students how to think across/through visual matter(ing)s (Curry, 1984; Henney; 1986; Schnettler, 2013).

**3.2.3: Responding to critiques.** Due to its anthropological roots, visual methodologies as an approach to research has endured criticism. However, despite critiques that photographs could not be objective, Margaret Mead (1975) famously stated that images were a “discipline of words” (p. 3). Mead (1975) argued that photographs contained large capacities to support
objective claims made during anthropological/sociological inquiries. This observational—yet rigid—approach regarding Mead’s (1975) suggested axiology of (early) visual methodologies was later deemed highly problematic by Banks (2001). Reflecting on Mead’s (1975) position almost 25 years later, Banks (2001) says,

Mead’s view now seems hopelessly dated, locked within a paradigm of positivistic social science […] that simply to watch someone is to learn something about them, knowledge that can be later analyzed and converted into intellectual capital for Mead. (p. 129)

While Mead’s (and others) observational use of visuals was considered at the time to be a way of seeing in anthropology, (post)modern thinkers would further leverage these claims into the development of visual methodologies as we know it today.

3.2.4: Visual creations. One such thinker, Rose (2016), shifted the attention from what photographs and visuals as data could support, to how visual representations could be used to create subjective interpretations that think “about the visual in terms of the cultural significance, social practices and effects of its viewing, and reflects on the specificity of the viewing by varying audiences” (p. 32). Referring to this approach as ‘critical visual methodology’, Rose (2016), guided by poststructuralist perspectives, developed an (aporetic) approach to visual engagements seeking to grapple with the various affects, approaches to seeing, (re)distribution, (re)production, and understanding(s) of visual materials. Further explaining this approach, Rose (2016) says:

Visual imagery is never innocent; it is always constructed through various practices, technologies, and knowledges. A critical approach to visual images is therefore needed: one that thinks about the agency of the image, considers the social practices and effects of its circulation and viewing, and reflects on the specificity of that viewing by various audiences, including the academic critic. (p. 23)
Rose’s (2016) statement regarding innocence could also be interpreted to include *temporal innocence*. Considering the posthumanist and poststructuralist underpinnings of this research and the way (re)photography corrupts strict demarcations of time and temporality, critical visual methodologies provided the best method for exposing secondary students’ dis/connections to the social future. I will further unpack related decisions in the following section (Section 3.3).

### 3.3: Implementation

#### 3.3.1: Why (not) visual methodologies?

Visual methodologies harmonize with posthumanist and poststructuralist ideals, specifically regarding the rejection of truth making and the encouragement of expression, dis/connectivity (relationships), interpretation, and imagination. Adding to this perspective, Hall (1997) says:

> It is worth emphasizing that there is no single or ‘correct’ answer to the question, ‘What does this image mean?’ or “What is this ad saying?” Since there is no law which can guarantee that things will have ‘one true meaning’, or that meanings won’t change over time, work in this area is bound to be interpretive—a debate between, not who is ‘right’ and who is ‘wrong’, but between equally plausible, though sometimes competing and contesting, meanings and interpretations. (p. 9)

Perhaps (re)photographs can be thought of as aporetic territories, or visual poems emboldening students to grapple with—and express—the nebulosity of time. Based on my experience working with secondary students, using images can be an effective tool for instigating (critically) difficult conversations. Although getting students to talk about photographs can be challenging, when visual matter(ing)s are framed in a way that values inter/intra-subjectivity and expression, students become more comfortable and open to testing out new perspectives.

#### 3.3.2: Piloting visual methodologies.

To inform this dissertation, I conducted a pilot study using Rose’s (2016) critical approach to visual methodologies. The goal of this pilot study was to help me determine how many images from each collection to use during the full inquiry. I worked with two different groups of students and asked for their input regarding the optimal
number of images to use. Between conversations with both groups, I determined that 15 images\(^3\) per collection would be used. Along with my desire to ascertain a feasible number of images to use in the full inquiry, I also designed the pilot study to see if a critical visual methodological approach garnered more conversation from the students.

To do this, I introduced a collection of (re)photographs to my first test group and asked them questions regarding: (1) observations; (2) context; (3) temporality; and (4) dis/connectivity. The group was able to speak about each guiding concept but at times, the conversation became redundant and stagnant. For my second test group, I presented the same collection and inquired about: (1) changes to matter(ing)s; (2) perspective(s); (4) temporality; and (5) dis/connectivity. By (re)directing students’ attention to physical changes that may/not have been present and the (re)photographs as well as the various perspectives in the images, the ensuing conversation was much more spirited. Whereas the first group struggled to come up with new aspects to discuss, the second group’s inter/intra-actions with the images flourished. Students began excitedly speaking over each other and asking each other questions relating to space (i.e., places in the image), time (i.e., transformation of social/spatial conditions represented), and matter(ing) (i.e., the way that matter changes over time). Perhaps most significantly, a student from the second group approached me several hours later in the day—as I was walking down the hallway—to mention that she had “never thought about time in that way.”

3.3.3: (Re)Photo-elicitation. To generate dialogue on this (ghostly) approach to history, this inquiry relied on visual methods, specifically photo-elicitation. According to Harper (2002), photo-elicitation involves the insertion of (re)photographs in a research project as a conduit of expressing thoughts/perceptions/attitudes within a certain context. Considering that

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\(^3\) The collection *Cass Tech Then and Now* contains 43 images. Students were encouraged to explore other (re)photographs in the collection once they completed their engagement with the 15 images selected for this study.
(re)photographs contain a wealth of complex information, they are “an opportunity to gain not just more different insights into social [and historical] phenomena, which methods relying on oral, aural or written data cannot provide” (Bolton et al., 2001). (Re)photographs can also foster dialogue about difficult and hard to comprehend (unknown) spaces of thinking and comprehension. Commenting on the reporting of un/knowns by referencing a speech by Donald Rumsfield, Noyes (2008) says:

Reports that say that something hasn’t happened are always interesting to me, because as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also [hauntingly] unknown unknowns – the one’s we don’t know we don’t know. (Donald Rumsfield cited in Noyes, 2008, p. 132)

Using (re)photographs to engage with unknowns can also prompt “different kinds of talk” (Rose, 2016, p. 315), including the expression of ideas/perspectives that are local (Berson & Berson, 2016). From a methods standpoint, photo-elicitation attended to the historical, temporal, and intrastitial nature of this inquiry by prompting the articulation of thoughts/feelings that commonly remain unarticulated (Allen, 2001; Blinn & Harrist, 1991; Holliday, 2004; Latham, 2003; Liedenberg, 2009; Mannay, 2010).

3.3.4: Curation of (re)photographs. The collection of (re)photographs used in this inquiry were researcher found (Prosser, 1998) and selected to depict “narrative account of some phenomenon” (Goldman et al., 2007, p. 15). These collections followed Goldman et al.’s (2007) selection process of using visuals during the inquiry process by aligning selective (visual) information with the theoretical/methodological commitments and inquiry guides of this study. Based on permissions granted by the (re)photographers (Appendix I), students only engaged with each collection virtually/online.
3.4: Participants and Recruitment

During this inquiry, I engaged with my own students to find out what is produced when they viewed, experienced, and inter/intra-acted with temporally dis/jointed resources. Participants were between the ages of 14-16 and were drawn from one of my 2019-2020 Global Perspectives courses at secondary school in Northwestern Florida. Of the 21 participants, ten identified as being students of color, while eleven identified as white. I choose to recruit participants for this study from this particular group of students for several reasons.

3.4.1: Abstract/independent/trusting thinkers. First, 27 out of the 30 students were also enrolled in the Visual Performing Arts (VPA) program at Sugar Hill High School (a pseudonym) where I teach. As these students had demonstrated a familiarity with expressions of creativity and abstractness, I felt that they would be a good fit for engaging with and responding to temporally dis/jointed visual resources. Furthermore, after having worked with all of my classes for the first quarter of the school year, it was clear that this group possessed deep relationships and connections with/to each other. This was evident by how students often arrived and departed in groups of five to seven, all the while talking (excitedly) about various topics. While in class, students frequently showed their support for each other during discussions, which in turn, I understood to mean that—on the whole—this group of students trusted each other. As establishing, fostering, and maintaining trust is essential throughout all elements of this inquiry, working with a group that already had established a foundation of connectivity and trust resulted in more fruitful discussions (Lincoln & Guba, 2013).

Additionally, considering the age range of participants, I believed it was appropriate to engage with abstract conceptualizations of space, time, and (contextual) matter(ing) (Jahoda, 1963; Piaget, 1936, 1930). Further, as was an expectation of students enrolling in the course, all
participants were required to have extensive experience working independently. This is significant because during the semi-structured focus group interviews, all my attention was focused on the small group of students being interviewed.

Along with their established rapport and independent work skills, the selected course was the first course/period on students’ schedule. This allowed me to capitalize on the sense of alertness that students have at the beginning of the (school) day (Callan, 1997; Dunn & Dunn, 1993). Of note, the other sections of the same course that I teach occur at the end of the school day and participants from those classes frequently exhibit fatigue and weariness. Thus, along with classroom dynamics that did not exhibit trust (i.e., name-calling and frequent off-task-ness), they were not selected as viable groups of potential participants.

**3.4.2: Priming interest.** All participants were introduced to the study and recruited using a flyer (Appendix C). Before distributing the flyer, students were primed for participation through a series of short brainstorming sessions centered first on space, time, and matter(ing) and then spacetimematter(ing) (Figure 5).

![Figure 5. Space, Time, and Matter(ing)](image)
It was my goal to expose potential participants to several of the constructs underpinning this study and help establish context. Further, these primer activities assisted in establishing a (chaotic) starting coordinate from which this inquiry could (d)evolve. Students began by engaging with the terms space, time, matter(ing) separately before discussing implications surrounding the collapsing of the individual terms into a single—albeit complex—concept, spacetimematter(ing). Despite the excited conversation that ensued from these activities and the information presented from the recruitment flyer, of the 30 students that were recruited, 21 opted to participate in the study.

3.5: Applying Visual Methodologies

3.5.1: Selection of (re)photographs and engagement. For this inquiry, I curated four collections of (re)photographs. Whereas spending extensive time sourcing the collections does not fall within the purview of this study, I believe that the context and intentionality in which each collection was created remains significant (Lincoln & Guba, 2013; Varga et al., 2019). As such, participants were prompted to think about the context and intentionality behind the creation of collection during each introduction of set of (re)photographs (Appendices E-H). I decided to use collections situated at various points in the past to allow participants multiple temporal engagements. This was an attempt to layer temporal depth/thickness (Deleuze, 1994, 1989; Rydén, 2019) into the conversations (Appendix D) and allowed me to ask participants about hypothetical (future) changes to each set of images (e.g., 50 years, 75 years, 100 years, 150 years). The results of this decision will be discussion in the next chapter (Chapter 4).

Broadly, the structure of each engagement included: (1) reading aloud a paragraph of contextual information about each collection of images (Appendices E-H) and instructions; (2) individual student engagement with the (re)photographs; and (3) responding artistically/textually
in a journal. More specifically, one week was dedicated to each collection and participating students had (approximately) 30 minutes of class time to engage with the focused set of (re)photographs. Along with this engagement, participants were asked to make at least three (reflective) journal entries throughout the duration of each week, including the charting of factors relating to space, time, and matter(ing). During the creation of responses, participants were encouraged to take photographs of surrounding matter(ing)s as a means for fostering a consciousness of personal history (Berson et al., 2017) and space, time and matter(ing) (Crane, 2013; Piaget, 1946). Despite no participants including photographs in their responses, many journal entries contained illustrations of surrounding matter(ing)s. As I will address student-generated photographs later in this dissertation (Section 5.5), I braided a clutch of these drawings throughout the findings section of this dissertation (Chapter 4).

3.5.2: Semi-structured focus group interviews. According to Lincoln & Guba (2013), “shared knowledge consists of the cumulative reconstructions of individual constructs or constructions (individual knowledge) coalescing around (tending toward) consensus” (p. 55). I selected this approach due to this study’s alignment with the idea that knowing/be(come)ing is a social enterprise (forever) existing in a state of transformation. Also, this flexible approach allowed for the (further) exploration of (sub/consciously) veiled perspectives (Denzin & Lincoln, 2011; Lichtman, 2013). Whereas “persons persist in maintaining existing constructions when they see no alternative” (Lincoln & Guba, 2013, p. 74), semi-structured focus groups established a space in which participants were exposed to varying interpretations, presumptions, and perspectives. In turn, this physical/cognitive territory provided a fertile environment for the development of (re)new(ed) ideas and perspectives.
Specifically, *prompts* and *probes* were considered during these dialogues (Morrison, 1993). Whereas prompts allowed me to ask clarifying questions and the ability to re/mis-direct the conversation, probes afforded me the opportunity “to ask respondents to extend, elaborate, add to, exemplify, provide detail for, clarify or qualify their response, thereby addressing richness, depth of responses, comprehensiveness and honesty” (Cohen et al., 2018, p. 514). Throughout my deployment of this approach, I remained mindful of how over-probing/prompting can increase the chance of leading participants to a desired response (Wellington, 2015). To combat this, I used probing/prompting in a way that politely asked for clarification or further information related to the purview of this study (i.e., dis/connectivity, hauntology, spacetimematter(ing), and temporality).

During the focus group interviews, I used my laptop to access each collection of resources on separate internet browser tabs. As the first of the semi-structured interview questions (*Appendix D*) asked about resonance, participants could access specific (re)photographs to support/further their responses. This use of photo elicitation scaffolded the sharing of participants’ experiences/perspectives of and with the resources (Bain, 2005; Holt, 1990; Mattson, 2009; Van Sledright, 2002), thus contributing to the joint development of (re)new(ed) meaning(s) (Lincoln & Guba, 2013). Considering questions guiding this inquiry, this approach served as an appropriate means for collecting data by spotlighting Roulston’s (2010) notion that “the interpretations and representations of data are consistent with the theoretical underpinnings for the study” (p. 202).

Semi-structured focus group interviews were chosen for this study to socially develop (re)new(ed) understandings and meanings (Lincoln & Guba, 2013; Roulston, 2010). This approach enabled participants to test out new ideas, challenge articulated perspectives, and
engage with language, ideas, and visuals expressed by their peers (Houssart & Evens, 2011). Further, focus group interviewing was especially productive in fostering a comfortable space for dialogue as well as “being economical on research time, and it encourages interaction between the group rather than simply a response to an adult’s question” (Cohen, et al., 2018, p. 529).

During this inquiry, I planned on conducting two rounds of focus group interviews with the intention of exploring temporal depth/thickness (Deleuze, 1994, 1989; Rydén, 2019) relating to resonance with participants. I wanted to know if/how students’ dis/connections shifted after two months of time had elapsed from the last engagement and group interview(s). While I could complete the first round of group interviews, I was unable to conduct the second round of interviews due to the outbreak of coronavirus (COVID-19). This decision was made after conferring with my dissertation committee and—although disappointing—presents an opportunity for future research (Section 5.7).

Participants were purposefully assigned to specific focus groups. Considering my experience working with the participants, this approach promoted a subtle group control by allowing me the ability to have a semblance of balance between (potential) expert/dominant/reticent speakers. Before creating the groups, I reviewed a list of all 21 participating students. Using my intuition and experience working with the class, I arranged participants into groups of seven allowing optimal opportunities for participation.

All semi-structured focus group interviews occurred in my classroom. I arranged chairs in the back of classroom into a circle and had a small table in the center of the chairs for my auditory recording device. This promoted a comfortable environment with all participants facing each other. Upon completion of the focus group interviews, I began hand-transcribing what was
produced. This decision helped maintain a sense of closeness with the data (Tilley & Powick, 2002) and allowed me to auditorily engage with participants’ responses.

3.5.3: Artifacts. Along with these recordings, this inquiry also used participants’ textual/artistic responses to each collection of (re)photographs as a data. On the first day of data collection, each participant was given a journal. Rather than including names, participants’ journals were designated each with a number on the back. As each engagement session occurred at the start of the week, I asked each participant to submit their journal on the corresponding Friday. Along with each in-class response, participants accessed —on their own time—each online collection and created several more responses. It was my hope that multiple engagements with the resources would contribute to the formation of stronger dis/connections. While I was prepared—during my analysis—to follow my school protocol (i.e., contacting school counselors) regarding the unveiling of any information that could be deemed as troubling within the artifacts, this was not needed.

After collecting the journals each week, I made photocopies of each entry and then stored the photocopies and journals in a locked file cabinet over the weekend. At the start of each new week, I set out the journals and asked participants to retrieve their journal using the numbers on the back. During this retrieval process, I reminded participants that their journals will be returned to them at the end of the school year for keeping.

Coupled with these artifacts, I also maintained a journal and auditorily recording of my reflective thoughts, perceptions, and comments about various elements of inquiry after the completion of each session. This reflective journal helped me better understand my role as an (human) instrument through the mapping of my own thoughts during the research process (Lincoln & Guba, 2013; Ortlipp, 2008). Moreover, by combining a self-reflective journal with
artifacts, observations, and semi-structured focus group interviews, I created a diverse corpus of data (Tracy, 2010) that exposed multiple angles of dis/connectivity to materiality, temporality, and the social world.

3.5.4: Observations. During students’ engagement with each collection, I moved around the room making observations. As a method for producing data, (semi-structured) observations extended beyond watching and recording. This process was used to make note of and record first-hand “thick descriptions” (Geertz, 1973, p. 312) of live accounts of participants’ inter/intra-actions, (non/verbal) behaviors, patterns, connectivity, routines, (re)actions (Simpson & Tuson, 2003; Wellington, 2015), “as well as the immediate sociocultural contexts in which human existence unfolds” (Jorgenson, 1989, p. 12).

While this position prioritized the act of observation, it also allowed me to engage peripherally with the students at all phases of the activity in a manner that is unobtrusive (Cohen et al., 2018). Further, the role of observer granted me the opportunity to “describe what [went] on, who or what [was] involved, when and where things happen[ed], how they occur[ed], and why—at least from the standpoint of participants—things happen[ed]” (Jorgensen, 1989).” This technique harmonized theoretically/methodologically with the framework of this inquiry, in that I—as a researcher/teacher/observer—am entangled in process of becoming with my participants.

3.6: Analysis/Interpretation

This important step in the research process permitted me to make sense of what was produced during the inquiry (Leech & Onwuegbuzie, 2007). Often described as “labour intensive and time consuming” (Lofland et al., 2006, p. 196), qualitative data analysis and interpretation transforms raw data by “searching, evaluation, recognizing, coding, mappings, exploring, and describing patterns, trends, themes, and categories in the raw data, in order to interpret them and
provide their underlying meanings” (Ngulube, 2015, p. 131). The following sections (Section 3.6.1, 3.6.2) outline my approach/reasoning for using thematic analysis to interpret what was produced during this study.

3.6.1: Thematic analysis. As defined by Braun and Clarke (2006), thematic analysis is a “method for identifying, analyzing, and reporting patterns within data” (p. 79). This flexible analytical approach works in accordance with any philosophical paradigm and relies on the use of intuition throughout the application of theoretical constructs and research questions. Although thematic analysis is most commonly described as organizational and descriptive (Boyatzis, 1998), it was used in a way that examined various (theoretical) angles and developed dis/connectivity across the created categories.

 Throughout my use of thematic analysis my research questions, review of literature, and theoretical framework served as guideposts during the (re)construction of thematic assemblages and their interpretation(s). While I approached the data corpus with these (textual) ghosts/hauntings a priori, I remained mindful of interpreting through the subjectivities embedded within each guidepost. This was done to ensure that I did not theoretically overwhelm what was produced during the inquiry. Put another way, as the ghosts/hauntings of my research questions, review of literature, and theoretical framework informed my entanglement(s) with the data, I worked to maintain a sense of openness and fluidity throughout the process. This emergent process provided the best opportunity to purposefully navigate/wander within the data corpus. With this being said, I (again) acknowledge that all of my ghosts/hauntings played an active role in how I mis/interpreted the data and conjured each of the three (overlapping) themes (Sections 4.1, 4.2, 4.3). Discussing a possible approach to working with mis/interpretations, Anzul et al. (2014) suggest:
[Emerging themes] can be misinterpreted to mean that themes ‘reside’ in the data, and if we just look hard enough they will ‘emerge’ like Venus on the half shell. If themes ‘reside’ anywhere, they reside in our heads from our thinking about our data and creating links as we understand them. (pp. 205-6)

Rather than worry about mis/interpreting what was produced during this study, I embraced the ghosts of my past/present/future experiences, inter/intra-actions, and (hauntological) relationships. This process required ongoing reflexivity to which I recorded and journaled about throughout all phases of data collection/analysis.

3.6.2: Thematic blueprint. According to Braun and Clarke (2006), there are six-steps that can be productive for conducting a thematic analysis: (1) familiarizing myself with the data; (2) creating initial codes; (3) thematic exploration; (4) review of themes; (5) definition of themes; and (6) write up.

To begin, I (re)read each journal entry response and transcriptions of the semi-structured focus group interviews. As I familiarized myself with the entire body of data, I wrote down early impressions, questions, and thoughts. This ingression into the data allowed me to consider broad, overarching themes before beginning to generate initial (theoretical) codes. To this point, coding is a concept that references how researchers identify and categorize—through comparison—specific bits of information with(in) a data set (Leech & Onwuegbuzie, 2007). These categories underpin the development of themes and “assists the researcher to move data to a higher level of abstraction” (Ng & Hase, 2008, p. 159).

3.6.3: (Textually/theoretically) Open coding. Although my coding scheme was open, I kept elements of my review of literature, research questions, and theoretical framework in the foreground of my thinking. As such, my coding scheme became textually/theoretically open and “provide[d] less a rich description of the data overall, and more detailed analysis of some [textual/theoretical] aspect of the data” (Braun & Clarke, 2006, p. 84). Accordingly, I did not
code every line of data but rather created pliable assemblages of data that dis/connect with/to this inquiry’s review of literature, research questions, and theoretical framework. Specifically, I looked for words/concepts relating to (re)photography, (bodily) matter(ing), and temporality. Further, these textually/theoretically open codes continued to change/shift I worked throughout the coding process. In a broad sense, I asked the data: (1) What were the pedagogical implications of working with (re)photographs? (2) How does spacetimematter(ing) impact how students process time? (3) What collection seem to resonate the most with participants? (4) How did thinking with ghosts/hauntings impact how students process time and temporality?

3.6.4: Collapsing codes. Once the first round of (textually/theoretically open) coding was completed, I started analyzing the codes—by hand—and began collapsing/conjoining them. Doing so further entangled myself in the research process and helped me establish a closer (physical) relationship to the data. This process was performed several times until I determined that I had a set of workable codes. To complete this step, I annotated my thoughts relating to the codes and possible themes on the physical copies of data.

3.6.5: Thematic pattern(ing)s. After this, I continued my (thematic) exploration, by searching for patterns relating to my review of literature, research questions, and theoretical framework. During this phase of analysis, I remained alert for any other bits of information that could be considered interesting and noted them accordingly. Charting these themes, I then made multiple passes through/over and created new (potential) subthemes, further collapsed others, and eliminated categories falling outside of my intended focus (Braun & Clarke, 2006). Upon completing this refinement and I arrived at three themes: (1) dis/connecting to (re)photography; (2) dis/connecting to materiality; and (3) pastpresentfuture(ing). Before moving on to interpretation, I reviewed each of the three themes for coherence/distinction while also creating a
graphic organizer (Figure 5). This organizer is presented at the beginning of Chapter 4 and shows the entangled/overlapping nature of the three themes as well as how the sub-themes are dis/connected.

3.6.6: From analysis to interpretation. While there is no direct, clear-cut way of interpreting qualitative data, I considered the interpretive phase to be “[forever] ongoing, emergent, unpredictable, and unfinished” (Denzin & Lincoln, 2005, p. 909). To assist me with illustrating and validating my interpretation of the data, pertinent comments and words were illuminated in the presentation of findings (Chapter 4). Quoting verbatim from my participants’ artifacts and responses during the semi-structured focus group interviews assisted in “revealing how meanings are expressed in the respondents’ words [and art] rather than the words of the research” (Baxter & Eyles, 1997, p. 508). From this methodological perspective, I made it a priority to highlight “the voices of participants, the reflexivity of the researcher, and a [in/]complete description…of the problem” (Creswell, 2007, p. 37), thus enabling the generation of (textual/theoretical) narratives crafted around participants’ dis/connections, reflections, and questions.

3.7: Ethico-Onto-Epistemology

Throughout this qualitative inquiry, ethics, ontology, and epistemology were folded into a single, inseverable concept: ethico-onto-epistemology. Ethico-onto-epistemology intertwines (bodily) ethics, knowing, learning, (remem)be(r)ing, and becoming in a way that “brings us face to face with the fact that what seems far off in space and time may be as close or closer than the pulse of here and now that appears to beat from a center that lies beneath the skin” (Barad, 2007, p. 394). Put another way, ethico-onto-epistemology is not shackled to temporal demarcations or
definitive territories of knowledge and is perpetually concerned with the unknown. From this axiom, the end of (bodily) knowing, learning, (remem)be(r)ing, and becoming is (never) over.

3.7.1: Responsibility. Moreover, I applied this conceptual (en)folding to attend to the notion of responsibility, thus rupturing traditional binary decision-making practices about what might be expected through the acknowledgement of (future) unknown spaces materializing throughout the inquiry process. This research is informed by an approach to responsibility that is skeptical about certainty and concerned with “unexpected inter[/intra-] actions” (Koro-Ljungberg, 2010, p. 605). Put another way, I remained leery of the unknown throughout all aspects of this inquiry and took the position that the concept of responsibility was not simply limited to ethical data collection practices.

Further, as Barad (2007) reminds us, “we are [all] responsible for the world of which we are a part, not because it is an arbitrary construction of our choosing but because reality is sedimented out of particular practices that we have a role in [re]shaping and through which we are [re]shaped” (p. 390). As this inquiry was designed around the exploration of (temporal) dis/connectivity and spacetimematter(ing)s, interlacing ethics, epistemology, and ontology helped me foster a broader perspective of inter/intra-worldly entanglements embracing liminality/imagination/skepticism which I applied to assorted facets of this inquiry (e.g., analysis/interpretation, focus group interviews, and observations).

3.7.2: Ethical (constructivist) entanglements/considerations. As a researcher-teacher-observer-participant, making sure this inquiry was conducted in an ethical manner was of top priority. Accordingly, I understood the vital role that trust played throughout this research process. To foster trust before the research process began, I apprised potential participants of the overall outline the study, disseminated the (minimal) risks, and communicated their right to
withdraw from the study at any given point. Throughout the study, I reminded participants of how the data was being safeguarded (i.e., locked file cabinet and password protected Box account) and my approach for maintaining their confidentiality (i.e., pseudonyms and collection of non-identifying journals).

While this trust was difficult to gain and could have been easily lost, I was intent on remaining mindful of trustworthiness during the semi-structured focus group interviews. Considering the constructivist alignment of this research and the belief that there is no objective form of reality (Gergen, 1991; Lincoln & Guba, 2013; Schwandt, 1994), I attempted to create a safe and productive space for participants to reflect, conceptually explore, and co-construct (re)new(ed) meaning(s) with their fellow participants. I did this by drawing upon my prior relationship(s) with participants and introduced each interview session in a way that emphasized respectfulness, openness, creativity, and experimentation. Through my affirmation and acknowledgement of each response, participants seemingly felt empowered to contribute to the (re)construction of (re)new(ed) concepts and perspectives. Based on my experiences working with each of the three focus groups, and as supported by the findings from this study (Chapter 4), I am inclined to believe this was achieved.

3.7.3: Alleviating pressure to participate. My role as a teacher could have influenced students’ willingness to participate in this study. However, with nine students opting out of the research project, any pressure to participant was alleviated through the introduction of the research project, recruitment flyer, and assent and parental permission forms underscoring the voluntary nature of participation. Also, all students, participating or not, had the opportunity to earn a total of eight extra credit points during the study. For the 21 participants, I explained that each Friday journal submission resulted in the accumulation of two extra points being added to
their overall course grade. Students that elected not to participate engaged in a similar activity during the in-class engagement session with a different set of visual resources and were also offered two extra credit points per submitted response. While it was not my intention to use the accumulation of extra credit points as a motivation of participation, I believe that offering both participants and non-participants the same opportunity to accrue extra credit points helped temper any pressure to participate in the study.

3.7.4: Institutional compliance. All data collection methods were approved by the school district in which this research was conducted (Appendix M). Also, I collected and engaged with data that was produced during this inquiry that was in complete compliance with guidelines established by the University of South Florida’s Institutional Review Board (IRB) (Appendix L). During the IRB process, I stated the rationale/design of the study, my plans for analyzing/interpreting the data, the role of the participants, my role as a researcher-teacher-observer-participant, my plan for ensuring confidentiality, storing of data, and my intentions for disseminating my data entanglement(s).

3.8: Summary

In this chapter, I introduced the constructivist orientation(s) of this research, provided an overview of the development of visual methodologies, study design, and ethico-onto-epistemological considerations. More specifically, this chapter details how I used visual methodologies to collect data (e.g., artifacts, observations, semi-structured focus group interviews) and interpreted—through thematic analysis—what was produced by 21 secondary students participating in this study. The next chapter, Chapter 4, presents the findings from this process.
Chapter 4: Findings

This chapter presents the findings from a qualitative study seeking to provide insight to the following research questions: (1) What does (re)photography expose about secondary students’ dis/connections to the social world? (2) How do students dis/entangle with spacetimematter(ing)s when exposed to (re)photographs?

Engaging with (re)photographs impacted participants conceptualizations of temporality in a myriad of ways and illuminated several other topics (i.e., ethico-onto-epistemology, educational inequities, and the body’s role in knowing/be(come)ing). Despite the crosscurrent(s) of these responses, I (re)arranged what was produced during this study into three overarching themes: (1) dis/connecting to (re)photography; (2) dis/connecting to materiality; and (3) pastpresentfuture(ing). The first theme, dis/connecting to (re)photography, attends to the first research question and exposed how secondary students dis/connected to the social world and how they study it. As the second emergent theme—also addressing the first research question—maps out the ways in which participants used the collections of (re)photographs to dis/connect to various materialities, the final theme, pastpresentfuture(ing), relates to the second research question and reports on how changes to materiality impacted students’ conceptualizations of temporality. Along with these three themes, this chapter includes a section titled un/becomings (Section 4.4) which outlines several (intended) aspects of the study that did not come to fruition.

To help me process the data, I created a graphic organizer (Figure 6) that includes codes, concepts, and dis/connections to temporality and spacetimematter(ing).
Considering the overlapping nature of my data corpus, I found the process of determining three themes to be challenging. However, constantly (re)reading/(re)annotating what was produced helped me to further understand the inter/intra-connections existing across the data. This process was iterative and consisted of several different drafts of Figure 6. Each organizer that I created provided more clarity with relation to the themes I ultimately choose to represent participants’ responses.

With this being said, participants made it clear that dis/connecting to (re)photographs was “exciting,” and “super-interesting” and foregrounded relationships between matter(ing)s and how people conceptualize time. While these relationships are replete with complexities and dependent on context, as one participant journaled, “[e]ach image provides a sense of history and storytelling for the viewer by way that historical elements are integrated and intertwined with the same location only in the present.” Put another way, and according to Rowan, “This may sound
cheesy, but matter does matter and impacts how we construct memories and experience time.” Interestingly, the way that participants described their experience with (re)photographs fell along a continuum that included descriptors such as “interesting,” “fascinating,” “mind-blowing,” “shocking,” “surreal,” “eerie,” “unsettling,” and “haunted.” Further, some participants noted that looking at the images conjured nauseum and “weird” was employed frequently through many journal entries. As a follow-up, I asked several participants about the use of the descriptor “weird” and the consensus was that it was used to describe feelings/reflections of uncertainty.

4.1: Dis/Connecting to (Re)Photography

4.1.1: Space matters. Participants created journal entries in a variety of places (e.g., riding the bus, school hallways, localities in/near home) and noted that physical spaces impacted how (re)photographs were used to study the social world. While one participant—journaling while riding the bus—extended their gaze to the outside world and noted that “these images look like parts of our local community,” others hinted in/directly that journaling at home allowed for more freedom and time to process. Of note, during each initial in-class engagement, participants sat in desks, ordered in rows. Very little sound could be heard other than the scrawling of pencils on papers or the clacking on computer keys. As I observed each in-class engagement, I found that the physical space of the desks governed my ability to navigate around the room, thus inhibiting whom I could assist/observe. This (counter) concept of confinement/freedom was further reflected in several journey entries, one of which included an illustration (Figure 7).
As one participant mentioned that “space definitely has an effect on the way we think,” another said that “I feel more relaxed and calm at home, which allows me to have a more opinionated perspective.” When asked about this in the semi-structured focus group interviews, Harley said that he “just felt more physically and mentally comfortable working at home.” Describing her experience journaling in a familiar environment, Justice said, “One thing I want to say about my writing at home, it’s more like word-vomit. I was laying down on my couch or my bed and listening to music, so it was just more chill. So, it wasn’t as structured as what I did here at Sugar Hill High (a pseudonym).”

Perhaps that it is not surprising that participants felt more comfortable responding while being able to stretch out at home. However, along with this comfort, working in spaces outside of a classroom redirected participants attention, thus impacting how they dis/connected to the social world around them. While reviewing the Civil War Then and Now collection in a school hallway, a participant felt “less drawn to the photos of the numerous dead or graveyards and instead, I seem to notice the communal photos more, almost seeing them reflect[ed] in the small communities around me. It is almost as if time has overlapped.”
When asked about implications relating to space, Lane spoke (in/directly) about the relationship between space and (living) matter. Specifically, he said,

I am one to believe in different like energies, you know the vibe of a room can completely change with one person entering and one person leaving. I can tell you, for a fact, that if Donald Trump were to walk onto this campus everyone would change. It would feel different. Not everyone would have the same reaction and for me it would not a good time. But whether you love him, are neutral, or you hate him, his presence in the space is going to have an impact.

Further adding to the entanglements of how space and matter impact thinking, Rowan mentioned time. Specifically, she said, “Time is key to this as well. At home we would have also had time to process it more and notice more details in the images.”

As Lewis Carroll (1865), author of Alice in Wonderland, reminds us “it’s no use going back to yesterday, because I was a different person then” (p. 155), multiple (arbitrary) engagements with visual resources fostered temporal depth/thickness (Deleuze, 1994, 1989; Rydén, 2019) in a way that allowed students to draw upon their (forever) shifting life experiences. Participants demonstrated that each (learning) engagement is predicated on space, time, and matter(ing)s and impacted the manifestation of dis/connections.

4.1.2 Close(r) looking. It was clear throughout each engagement session that students closely examined the images and then leveraged their methodical observations, or what Woyshner (2006) referred to as a “close looking” approach, into imaginatively complex thoughts about the past, present, and future relationships not/represented in each of the collections. As (re)photographs are unstable (Baudrillard (1994/2004, 1993), they provide opportunities to, as one participant noted, engage with “distant future[s] of the past.”

Rather than quickly disengaging with the images (Schocker, 2014), I observed participants inter/intra-acting with the (re)photographs for extended periods of time, sometimes
for several minutes. Although the amount of time varied per person and per image, participants noted details in their journal reflecting the attention/focus given to minutiae embedded within the visual resources. While one participant—responding to the *Cass Tech High Then and Now* collection—observed that the “floor is coated in dust from something, which makes me think that it’s been awhile since the closing of this school,” another participant noticed the ways in which matter(ing)s had changed in the *Boston Then and Now* collection, illustrating specific details/differences between time periods (Figure 8).

![Figure 8. Boston Then and Now Changes](image)

Describing the image, the participant mentioned that there are “more trees, more tall buildings behind churches, no gate around the fountain, and there used to be more people bustling about in the area.” Having the ability to toggle back and forth between the past and present in the first collection—*Boston Then and Now*—primed participants for thinking of the ways in which surrounding matter(ing)s of the world have changed over time. As there seemed to be “new stores, new streetlamps, and fresh buildings,” there also was “less huge signs, less ongoing traffic, more people, less patriotic decor, and noticeably changes to vehicles.”

### 4.1.3: Dis/connecting to color

The contrast in color(s) impacted the way students felt/thought about each image. Responding to the *Cass Tech High Then and Now* collection, one
participant noted that “despite damage to the school, the bright and colorful background gives this image a feeling joy.” Along with associating positive feelings with bright colors, other participants had more complex reactions to the (disjointed) use of color in the Cass Tech (re)photos. Journaling about this, one participant said:

It is ironic that the pictures that are only a few years from being black and white, are consistently more vibrant, energetic, and colorful than the modern ones. The colors almost show how this was the prime of the school. Contributing to this is the fact that the lights are always off in the present.

Participants’ responses propose that juxtapositions of color can “help blur time” and provide the consumer/viewer with a perspective that “time is forever folding onto itself.” Along with thinking about how the color in the (re)photos influences the mood of the image, participants also began to contemplate temporal aspects relating to the (re)construction of the images. Just because an image lacked color did not necessarily mean that it was created at a point farther back in time then an image with color. In this Baudrillardian (1994/2004) sense, working with (re)photographs foregrounded the notion that visual images are complex and are unstable. To this, one participant wrote:

A main thing that shows through all the present photographs is that they all contain color instead of being black and white like their older counterparts. Which of course is not new to us, because we are used to being able to take a picture on our devices and see color in our photographs. However, we also can add a filter to change it to black and white. We can decide how old we want to make something look. We can disguise any subject the way we want and have the technology at our fingertips to do so.

While arguing for the interrogation/acknowledgement surrounding the instability of visual images, Baudrillard (2000) also noted that visual representations contain “some fragments of the real [that] are still floating and drifting” (p. 63) before/during/after our consumption. Participants clued into these ephemeral fragments and were provoked into thinking about various (social) elements (not) expressly represented in several of the
collections of (re)photographs, thus exposing ethico-onto-epistemology, or the understanding of the world because of participants’ entanglement with it (Barad, 2007).

4.1.4: Matter(ing)(s) of curiosity and resonance. Just as “most images speak [and] tell stories” (Baudrillard, 1999, p. 175), working with the Cass Tech images fostered a sense of wondering about “what happened to stop the learning process at that school?” Participants displayed a range of complex thinking within this context, ranging from inquiries about the deterioration of the school to the invisible (social/political) structures that perpetuated its abandonment. As one participant “wish[ed] the old photos were put into different places so that I could see the rest of the rooms,” others had questions concerning the (physical) destruction of the school. Examples of these questions included: (1) “Did whomever did the damage leave a single trophy in memory of the school”; (2) “Was it the students or the teachers that destroyed the parts of the school?”; and (3) “Why are some of the rooms more destroyed than others?”

For one participant, the observable changes to Cass Tech High School sparked ruminations about the role that race played in the school’s shutdown/destruction. Speaking to this point, Gray, a student who identifies as white, said:

Something I noticed in the Cass Tech Collection was that in the hallway, there seemed to be a majority of African American students. And because these students were African Americans, I started thinking about whether or that was the reason why it shut down. If it was more diverse or with different races would they have made an initiative to save the school instead of shutting it down. And how someone, most likely white, was sitting in an office making these decisions that impact the school.

The images juxtaposing vibrant students with dilapidated surroundings inspired another participant to move beyond considering the causes for the school shutdown and investigate the actual events leading to the closing of the Detroit-based school. Outlining this, the participant journaled,
My theory:
Either the high school ran out of funding for all of its programs and people didn’t want to go to the school anymore, which resulted in the school losing even more funding until they just had to shut it down because there wasn’t enough money.

What actually happened:
Cass Tech high school was an insanely expensive high school to build/maintain, the building had eight floors which included a gymnasium, indoor track, a three-thousand set auditorium with a balcony, laboratories, machine shop, cooking classes, mechanical drawing classrooms, a swimming pool, and so much more! Compared to schools today, Cass Tech was like a high school for the gods. The classes also changed, for example offering aeronautics when man landed on the moon. This high school was clearly only for the best and brightest. However, in August 1964, the older version of Cass Tech was reduced to rubble to make room for the Fisher Freeway. After that, the school started falling apart. Students were falling behind grade levels and it started to raise the concern for everyone that it was too small and falling apart from neglect. The schools’ additions began falling apart as well, the city’s department of education deemed the auditorium unsafe, the roof leaked and plumbing consistently backed up. This led to the school district announcing in March of 2000 that it was planning to build a new Cass Tech and vacated the old one. Everything from the older school was left behind and if you walked into it, it would be like stepping into a high school frozen in time for a year. Ultimately, on March 23rd, 2011, demolition crews would begin tearing down the walls.

When pressed to consider how the notion that “part of their own history could be deemed (at some point) not-maintainable, participants exhibited strong (affectual) reactions.

During the semi-structured focus group interviews, I asked one group, “How would you feel if, say 20 years from now, you were to get an email or phone call saying that Sugar Hill High is being shut down?” Immediately after posing this question, I noticed most how participants began to uncomfortably shift their bodies in their chairs. Undeniably, the future mattering of matter(ing)s matters and plays a role meaning-making.
4.2: Dis/Connecting to Materiality

4.2.1: Entangled dis/connections. During this inquiry, Phoenix suggested that “our story is dependent on the entanglements between living and nonliving things and these give us opportunities to connect.” However, this study also exposed the different ways in which that secondary student form dis/connections from, with, and to non/human matter(ing)s. Some participants dis/connected to similarities—"although, in a way they are different"—between the images, while others dis/connected to the stark contrasts reflected in the changes to matter(ing)s. According to one participant’s journal entry, “I actually see and feel a lot of disconnect. The general energy is just so different. I can literally sense the movement in the old pictures and the silent stillness of the new pictures.”

For Morgan, the *Cass Tech High Then and Now* collection—juxtaposing pictures of severe changes to matter—caused her to disconnect to the story being unveiled. When asked if it was easier to connect or disconnect to the past/present by seeing images that were drastically different, Morgan said,

Disconnect. Because to me, it was like, I know things happened in the past. For example, like when I think about stuff that happened a long time ago, I know it happened in my brain, but I don’t process how it actually happened because everything looks similar. For me, when there are similarities, I had an easier time connecting them together. A drastic change is a complete disconnect. It is not even the same thing in my mind.

To help me clarify her statement, I responded by asking, “Are you saying that these different spaces in the Cass Tech collection are so different that it was hard for you to connect that they were the same place? That these could be from any place or any school, or even two different schools for that matter?” Morgan nodded her head while softly saying “yeah”, as did another participant, Phoenix. Speaking about the stark contrasts represented in the *Boston Then and Now* collection, Phoenix also referenced the brain:
“For me, those pictures from Boston, where we used the slider to switch back and forth, felt really disconnected in my brain. But, the [images] that are more faded together, the ghostly ones, make me think that the past and present are more united as a whole.” As I discuss in the next section of this chapter (Section 4.3), (re)photographs that introduce ghosts/hauntings—the return of history/ies—and changes to materiality impacted how participants conceptualized temporality.

As Barad reminds us, “creativity is not about crafting the new through a radical break with the past” (Juelskjær & Schwennesen, 2012, p. 16), another participant expressed a more complex conceptualization of dis/connecting that included traces (upon traces) of temporality. Journaling about images from the Civil War Then and Now collection, the participant wrote,

I can connect to how these images mirror each other. The aged image is full of life in a dead form and the trees and natural elements depicted in the photo are great in number, especially when in comparison to the more recent image. The newer picture is the opposite, but the same. There are more dead things in that the buildings are now plentiful as opposed to nature, but there are more people in the image. More life and less life. The older image shares that with the newer image, more life and less life.

Thus, secondary students dis/connect to similarities with regards to changes of matter(ing)s as well as differences. Regardless, these dis/connections can range from simple to complex and can cultivate fields of thought about influencing factors that enact/promote change(s) to matter(ing)s.

4.2.2: Intentionality of change. When considering (future) becomings and ongoing differentiations (Barad, 2001) related to Sugar Hill High, participants made it clear that the intentionality behind changes to physical spaces carry significant implications relating to hypothetically responses. Thinking about a future for Sugar Hill High that mirrors the past of Cass Tech High elicited emotional responses, as evidenced by increased levels of volume/enthusiasm in this dialogue:
Erin: I wrote about that, about being here at [Sugar Hill]. And the fact that I hold this place to such a high standard because I really do love being here and the fact that I going to graduate. And if I looked back at pictures some day and saw everything falling apart, it would be really upsetting.

Gray: To know that you walked the halls of this school and to see that the ceiling is leaking and there is graffiti all over the walls, hurts. That is a sense of pride for me, I wouldn’t want to see a school that I got a diploma from falling apart, especially when there is nothing you could do about it.

Blake: Especially because the community around here is so tight with our school. I would be extra hard for this place to fall apart.

Erin: Right and I think it would affect the community too because so many people around here in this area either went to this school or graduated from here. This school is significant to our community. So, if this school were to shut down, I think it would greatly affect people who went here. But it would affect the community too.

Lane: I went to a basketball game recently and they were calling up alumni and one guy was walking out on the court with a cane and he was still happy he could be here, in the physical space. That definitely hit me.

Despite these feelings of disappointment/sadness, participants from this same focus group had oscillating reactions when asked to consider (physical) changes that Sugar Hill High could potentially endure within a positive context. This led to a discussion about the idea of intentionality:

BAV: We are talking about matter going in one direction, specifically in a destructive context, or deterioration. But, what do you think happens to memories and feelings associated with spaces when spaces change in opposite directions that reflect creation? Say when it gets refreshed, remodeled, or repainted? Or even replaced. Does that idea regarding the intentionality of physical change impact how you connect to physical spaces?

Blake: Yes! I went to my old elementary school and they repainted over everything and painted trees on the walls. It looked so weird. And in my mind, it looked so different. I saw the past and but then I’m seeing the present and what it is now. And I’m like no way. It’s just hard to process, but I feel okay with it.

Erin: In my mind I’m thinking about more extreme changes, like what if this school became a homeless shelter or a park. Something that could benefit the
community and everyone. Personally, I think that would be better than having it be abandoned.

Harley: I’ll be honest, I wouldn’t care if it was being remodeled. If it was being destroyed than that is different. But everything gets remodeled at some point.

Gray: I disagree. I think that would upset me more. Something about that, it’s not going to be the same place anymore. You can’t acknowledge it as being the same thing. If it is abandoned, it is not gone. There are remnants of what it used to be, but when you remodel it or replace it, you basically removed everything that made it what it way.

The topic of intentionality (re)surfaced in the third focus group interview. Participants were prompted with a similar hypothetical situation that involved Sugar Hill High School being remodeled/repurposed. In this case, participants generally agreed that if the school space was transformed into something that could benefit the community, “that would be okay.” Interestingly, this conversation led to an (abstract) exchange with a participant about how physical spaces can trigger memories.

4.2.3: Matter(ing)s of memory. According to London, people are always sub/consciously creating memories. From her perspective, this occurs at all stages of development. During this exchange, she explained:

London: What we are talking about just made me think of babies. It’s not that they don’t remember things, it’s that they can’t put words to what they can remember. So, for us, if we think about something that happened when we were super young but we know that it happened, but we don’t remember it happening, we just can’t put words to what happened, sometimes returning to a physical place can trigger something.

BAV: So, if I am understanding you correctly, you are saying that we, humans, are constantly recording information and sometimes physical matter can trigger memories?

London: Yes! And, I don’t think memories stay constant as our brains are only remembering the last time we remembered things. And so, it changes constantly and if something was to interrupt that, like if we hear about the school being demolished, our memory is going to be skewed. This will be thinking about it more in the original sense. It is remembering the last time you remembered it.
Memories and nostalgia are fraught with complexities and are contingent on the way that individuals inter/intra-act with matter(ing)s of the past/present/future (Al-Saji, 2004; Deleuze, 1994, 1989; Proust, 1992). Put another way, while the present contains traces (upon traces) of the past, how people recall and engage with the ephemerality of history/ies varies in accordance to individual subjectivities/experiences. Expounding on this, Roux, said,

The way memories are [re]made varies between people as well as between buildings. My mom used to go here in the 90’s and when she comes back to campus, her memories have changed. She says, “wow, it’s all so different.” I also think that if a building is remodeled or repainted it won’t hold the memories that it held before.

While Roux’s reference indicated that physical change(s) to matter(ing) endurably impact the shifting nature of how people conjure memories, another participant felt that the implications of changing Sugar Hill High—even if in a positive context—would be much more severe. Speaking about these changes, River mentioned that major changes would “feel like a part of my childhood would be taken out of me and that a bunch of my memories would float away.” As participants grappled with making sense of future feelings connected to present matter(ing)s of memory, Rowan connected the Cass Tech High images to her (empathetic) feelings for future students attending Sugar Hill High:

I hold a lot of appreciation for [Sugar Hill High School] and the opportunities here. The thought of future students not having this place is so upsetting. I think about how the Cass Tech pictures show an unsettling view of how people used to enjoy the space and then how all the stuff [or matter] that was used has become trash and irrelevant. I think it destroys the memory of the school. My memories of [Sugar Hill High School] are so fond and I’ve had such a great history here that I want that for others. I don’t want it to be different for them.
Although participating in a different focus group, Lane had a different perspective regarding memories and changes to matter(ing). According to him, “all matter, say for example bricks, contains history and has the ability to speak. However, we just can’t translate.” I understand Lane’s comment as an articulation of the complex nature existing between space, time, and matter (Barad, 2010, 2007, 2003, 2001). With this being said, and in some cases, people can translate the stories/histories that matter(ing)s attempt to express. Working with the Civil War Then and Now collection provoked another participant to think about the ways in which history is demarcated/translated in public spaces (Figure 9).

By asking “Why is his (referencing a Confederate soldier) house still up?”, this participant is challenging Lane’s perspective about the non-translatability of matter(ing). Further, this journal entry is evidence that articulations and traces (upon traces) of history/ies—by/through matter(ing)s—are indeed comprehensible, debatable, and deserving of our consideration/investigation (Derrida, 1993b). Implications relating to gatekeepers of matter(ing)/history is further discussed in the next chapter (Section 5.7).

Regardless, working with (re)photographs not only cultivated thoughts relating to
matter(ing), memories, and meaning-making but also prompted participants to consider
the ways in which changes to materiality help them make non/sense of time and
temporality.

4.3: Pastpresentfuture(ing)

4.3.1: Non/sensical understandings of time/matter(ing). Participants articulated an
impressive range of responses relating to the relationality of fluctuations between time and
matter(ing) (Barad, 2010, 2001). Put another way, according to responses, observing changes to
matter(ing)s are helpful for processing the ways that time has elapsed. While engaging with
(re)photographs prompted Bex to mention how the “seasons, tides, cycle of the moon, and
changes to our physical bodies, like us getting wrinkles” aides people in understanding changes
to time, during the focus group interviews, several others engaged with me in a dialogue
situating changes to time/matter within a social in/justice context (e.g., incarceration, solitary
confinement):

Quinn: I think there is a social aspect to this idea of changes to matter helping us
understand changes to time.

Roux: I definitely think so and agree with that statement. Maybe, for example, in
everyday life, even in the past, you can see how much time has passed by paying
attention to position of the sun and moon. However, everyone doesn’t have that
privilege. I’m think about when someone gets put in a cell or in a place where
nothing changes, and it is just white walls all around them, day in and day out,
they don’t know how much time has passed.

BAV: That is an interesting thought. What might a rephotography project look
like in the context of like a jail or a space that does not change at all? What might
that do to a person’s mental state of mind?

Bex: I mean, as that’s kind of the whole thing about solitary confinement and why
it is so terrible. You don’t know how much time has passed.

River: I was watching a documentary. And someone was in there for 20 years and
he literally lost his mind. Most people become depressed, but the authorities kept
him in there until ultimately, he tried to commit suicide. If nothing changes around you then how do you process time?

Roux: And another thing about the hole or solitary confinement is that there are no lights and no people. When you are growing and changing and people alongside you are growing and changing then everything is in balance. If that balance is disrupted, then I could see how you would feel a sense that you are trapped. In prisons and jails, you can’t leave, you are trapped. And if you’re not surrounded by people that are changing alongside you, I would imagine it is tremendously difficult to find a sense of self and a sense of mental freedom.

Thus, as expressed by participants, there is an ethical/natural order to time that includes changes to various matter(ing)s that make up of the social world. As humans move through time, there is a degree of comfort in seeing (material) aspects of the world contort and undergo transformations. With that being said, engaging with resources displaying physical changes to matter(ing)s led to the erosion of strict temporal demarcations (e.g., past, present, and future) prompting a conceptualization of time/matter that is fluid and nomadic.

4.3.2: Fluidity of matter(ing). Several patterns became exposed when participants engaged with the final two collections of resources (Ghosts of War and Civil War Then and Now). Participants began to dis/connect past history/ies to present matter(ing)s of the world and the way these dis/connections create context. According to Lane, “once you know the history behind something, it changes.” Importantly, Phoenix mentioned the divergency undergirding how different people create relationships between the past and matter(ing). Specifically, she noted that “matter can be so important to one person but worthless to another, but there can be changes over time. But, this has all kept me thinking a lot about the relationship[s] between space, time and matter.” Thinking about the relationship between spacetime/matter(ing), or the overlaps between each of these entities, can also get secondary students to consider the history/ies that cannot be
seen, such as Gray mentioning that “History is obviously something that happened but it gets easy to forget when you walk down the same streets every day” and Justice stating how “The last two collections have given me pause. Literally, the other day I was walking down the street and I paused to think about what everything must have looked like before all these [new] buildings went up.”

Along with what cannot be (physically) seen, when encouraged to think about the relationship between space, time, and matter(ing), River displayed a nuanced perspective about the physical distinctions between space(s)/matter(ing)s and how these variations prompted her to think about the (in/visible) histories of the present/future:

Last week I was going to work at my hotel, which is this big and beautiful building that is bright white and new. It is surrounded by older buildings, most likely built at different points in time. And right next to the hotel there is a parking lot and whenever I head into work, I see a homeless woman. She’s usually in the shadows, but the other day I noticed how she had cut a hole in a trash bag to keep herself dry from the rain. It was like you could still see the past right outside the doors of our present hotel. And someday in the future, I’m sure everything will look like our hotel.

In a similar vein, one participant journaled about the how discrepancies of surrounding matter(ing)s reflected in the Boston Then and Now collection provoked thoughts about temporal convergences suggesting that perhaps time/matter(ing) cannot be strictly demarcated and remains fluid (Figure 10).

![Figure 10: (Material) Meeting Points of Time](image)
4.3.3: **Fluidity of time.** When presented with (re)photographs blurring the shifting nature of matter (e.g., *Ghosts of War* and *Civil War Then and Now*), participants began to think of time as being elastic, malleable, and complex. According to Lane, “the future can become the present and the present becomes the past. So, time is constantly changing its route and is constantly being reborn.” Just as working with elements of temporality can be challenging for students (Curry, 2007; Martin, 2016; Wineburg, 2011, 1999), engaging with the last two (ghostly) collections (e.g., *Ghosts of War* and *Civil War Then and Now*) prompted students to think specifically about the “in-between spaces of time” and how “time isn’t what you think.” London mentioned something similar, noting that “after seeing the ghosts, I definitely think time is fluid.” When I asked a focus group about how the notion of ghosts/hauntings made them think about the fluidity of time, Archer—referencing a (re)photograph from *Civil War Then and Now*—said,

> It is almost overwhelming. I want this connection the past so badly but I separate myself from the past, like it was so long ago. But, looking at images like this, where nothing changed except for new generations of people and the principle[s] of these buildings. Even the fact the slave auction house is devoted to teaching people about slavery. It made me think about how right now, being in the mundane, we are creating history and there are going to be people in the future that will be interacting in these very same spaces. They will be looking back on us and saying the same thing that I am, that it was so long ago and that they were such different people.

Working with ghosts also helped participants extend their conceptualization of history/ies beyond humanist trappings (Figure 11).
Although taking an approach to history that is inclusive of non/human matter(ing)s varied amongst participants, findings from this study establish the potential for thinking with ghosts/hauntings within the context of environmental justice. As one participant journaled, “ghosts force one to contemplate the history and physical ties that a location has to events and [how] people and stuff are affected,” thus exposing how ghosts/hauntings can be productive in helping secondary students complexify the way they dis/connect to temporality and (non/human) materiality.

4.3.4: Ghostly entanglements. Participants overwhelming found thinking with ghosts/hauntings to be beneficial in further nuancing (existing) relationships between the past/present/future. For Gray, ghosts/hauntings “enhances the picture in a larger extent as it gives context to the building. I am sure if any of us were to look at the building without the ghosts, you could try to figure it out from the names and clues, but at a quick glance, it’s not much. But having the context of the ghosts makes the story being told in the image hit a lot harder.” Along with helping add (historical) context, Lincoln mentioned that “ghosts bring history to life which makes me think about everything that possibly happened around us.”
As the “transparency in the ghosts offers a great view of the parallels and the differences,” several participants wondered what it would be like to visit spaces of historical(ly) (violent) significance with this “ghostly perspective.” Responding to an image from the Civil War Then and Now collection, one participant journaled, “It makes me think of who is currently haunting the apartment that was built over the slave houses and I wonder what the air feels like there.” In a similar vein, another participant inquired about “how it must feel to be there. Is there a totally different vibe or feeling being somewhere with such drastic death tolls?”

Interestingly, engaging with ghosts/hauntings also elicited positive feelings. For example, one participant working with the Cass Tech High (re)photos noted the (positive) affectual implications of seeing (anthropocentric) ghosts: “I can still feel the people there. I see the look on the ghost’s faces and it is just so joyous. I can actually feel their joy and happiness.” Associating positive affects to the (re)photographs were not limited to direct reflections of happiness/joyousness. Referencing the Civil War Then and Now collection’s ability to visually slip between past/present, Lincoln stated:

For some reason, I feel like the spirits are still wondering around the field. I’m not getting any bad spirits, just good ones. Even though what happened in the past was upsetting, still, being able to see the recent picture gives me a happy vibe. The old image looks a bit scary to me, especially the dead bodies. It could be the filter of the image but the now picture gives me happy vibes. It is nice knowing something is still there and the in-between reminds me that no matter how bad something is, it will change.

Further, working with historical ghosts fostered (future) consideration(s) for how history/ies haunt/return (to) local spaces. According to Rowan, “These images made me realize that we [all] walk by ghosts every single day without realizing it. Ghosts help us remember what we never knew and who knows what we might learn someday.” Adding to this thought, Roux said: “And who knows who or what is haunting this place. As far as I know, there were no battles here in
this area. However, it amazes me to think about people in other places where timeless battles have taken place, and how they don’t even realize or care about it.” While it could be said that the idea of ghosts/hauntings were present in three of the collections (e.g., Cass Tech High Now and Then, Ghosts of War, and Civil War Then and Now), engaging with ghosts/hauntings within the context of a high school space (e.g., Cass Tech High Now and Then) caused participants to contemplate the traces (upon traces) of history/ies surrounding them every day. As noted by Luke, “Reviewing these photos in the hallways of Cass Tech make me feel like there are ghosts of this high school still present and existing in the space and matter around me.” This idea was reiterated by Phoenix, who dis/connected to the ghosts in the Cass Tech images while congruently struggling to make sense of the past/present/future:

> It feels like the ghosts must live there, the ghosts of their development. In the image of the dance studio, I feel like the dancers should still be dancing. It feels so recent, yet so long ago. Also, I keep seeing people I know in these kids. The ghosts [of Cass Tech High] are so familiar.

Thus, thinking with ghosts/hauntings is “not a puzzle to be solved; it is the structural openness or address directed towards the living by the voices of the past or the not yet formulated possibilities of the future” (Davis, 2005, p. 378-79). A possibility that includes (multiple) (re)occurring patterns of history.

**4.3.5: Cyclicity of time.** Along with thoughts about the ways in which history/ies return(s), thinking with ghosts/hauntings also got participants to speculate about the possibilities of history/ies repeating itself. As mentioned by participants, this (chaotic) cycle has an entangled relationship with the ongoing (un/en)foldings of spacetime-matter(ing). To help expound on this circuitous approach to temporality—the cyclicity of time—I created an illustration underpinned by the thoughts of participants (Figure 12).
Figure 12. *The Cyclicity of Time*

During this inquiry, perhaps ironically, participants frequently returned to the idea that “history repeats itself” considering “we still have protests, there are still wars and discrimination.” While Morgan struggled to articulate history’s cycle, calling it “really weird,” Lincoln dis/connected to the ways that “chaotic spaces will always be rejuvenated and go back to places of peace. There has always been a cycle.” Responding to this, Justice, Luke, and Jordan discussed the shifting nature of “the cycle” within the context of spacetimematter(ing):

Justice: Going along with the cycle, the cycle can also evolve. Like I am sure that Cass Tech will be a high school again at some point with children, but it is going to have new technology, new paintings, new lockers, and new bathroom[s]. Despite the return of this future school, everything is going to change, even it is in that cycle. Matter always changes.

Luke: I think in this same way, that the return to the high school used to be this great site and now it’s abandoned. It’s scary though, because if you look at the past ones involving war and things like that, now it’s like nothing ever happened. And at one point those spaces were exactly like are now and I think nobody would have ever imagined what was going to happen to that space. So, in that way, it is not like scary. I mean, I’m not scared. It just makes you think. You never know what is going to happen or what will change back.

Jordan: It made me think of something similar. Looking at the rephotos made me think about the past and how their present is affecting my future and even though it’s in the past, I am still affecting the present. And how what I am doing now will impact someone else’s future. My future will be their past, so it made me think a
lot. I think about that all the time. With different things like the primal ages of the world and how that was our past and how our past will be our future because, if we continue to the way we are going, we will be going to end up back there.

Adding to the complexity of how history/ies (perpetually) return(s), Roux and Quinn, both students of color, discussed how the cyclicity of time changes within the context of purpose. Dis/connecting the Cass Tech High Now and Then collection and Civil War Then and Now collection, they said:

Roux: I think history has a tendency of repeating itself and you have seen it with different things. However, although the events remain in the same bubble, the purpose changes and why you are doing it changes. The purpose changes but it still happens. In one of the Civil War [(re)photos], there was a picture of people taking a photograph in front of [a] Confederate man’s house. I noticed white men and women on the front [row] of steps and a white woman taking a picture of a class of students, who were mainly white, except for two Black girls. And the two Black girls were not smiling, [whereas] the 25 or so white faces were smiling. That made me think that although their purpose is different, you know they were there on a fieldtrip, the expressions and feelings are similar.

Quinn: Right, and in the Civil War collection there was that image of the new and old slave house. What was the purpose of the [new] house being there? In different types of war, other than American war, usually the people who take the territory do what they want with it, but with this, they kind of keep it all the same. We know their beliefs are wrong but they kept this house and kept this memory here.

Roux: Exactly. Which makes me even think about the school in Detroit. We can keep the confederate house shiny and clean, yet we can’t maintain the [educational] world for those students, most of whom were Black.

Quinn: I think Detroit was kind of rough. It was rated one of the most dangerous cities in the US, but I think now in recent times, people are looking for something else. I think it will certainly be renovated at some point. And Detroit is going to become hip again. I feel like there is a pattern with everything. The only real physical connect is the ground and basically its purpose is superficial to fit in modern society or what we need today.

Participants clearly demonstrated that temporally disjointed resources displaying various changes to materiality (re)shaped their relationship(s) to social world within the context of temporality.

As these relationships are (irrevocably) entangled and changing, (re)photographs also instigated
thoughts about why these relationships *matter*. Further, although “thinking about time is super hard” and “can be confusing,” there is a subjective nature to understanding, processing, and grappling with time. As River aptly noted, “how we each interpret space is a fascinating thing, especially when we think of how matter changes over time within certain spaces” thus contributing to a conceptualization of time and temporality that is complex, (forever) influx, and relational: pastpresentfuture(ing).

### 4.4: Un/Becomings

#### 4.4.1: Un/flattening spacetimematter(ing) and pastpresentfuture(ing).

While the deployment of both spacetimematter(ing) and pastpresentfuture(ing) attempted to flatten each (nuanced) concept into a singular (abstract) idea, a disproportionate dispersion of space, time, matter(ing) and past, present, future(ing) occurred. Participants discussed the relationship between space and matter(ing) (*Section 4.1.1*) and time and matter(ing) (*Section 4.3.1*), but failed to discuss the (un/equal) relationship between space, time, and matter(ing). Basically, spacetimematter(ing) was pulled (back) together/apart into individual concepts and then mis/matched to articulate various dis/connections (e.g., content, emotions, entanglements, and wonderings) to the social world.

Although the collections of (re)photographs leveraged juxtapositions of the past and present into dialogical engagements with the future, pastpresentfuture(ing) occurred in a way that was asymmetrical. Perhaps due to the lack of future-oriented materials, a significant portion of the journal entries and focus-group discussions centered around the past and present. As such, pastpresentfuture(ing) exposed a *future* potentiality for further troubling temporal engagements with (re)photography through the possible addition of a third—participant generated—layer/drawing that puts the past, present, *and* future in direct conversation with each other.
4.4.2: Articulations of abstraction. Although students were encouraged to take photographs of surrounding matter(ing) during their out-of-class engagements with each of the collections (Section 3.5.1), no photographs were included in the journals or presented during the focus-group interviews. Recommendations for the future facilitation of photographic engagement seeking to “engage research participants and researchers in a process of social learning, analysis, and empowerment” (Rose, 2016, p. 315), or photovoice, is discussed in Chapter 5 of this dissertation (Section 5.5).

4.5: Summary

In this chapter, I presented what was produced during a qualitative study with 21 secondary students enrolled in a Global Perspectives course at a public high school in Northwest Florida during the 2019-2020 academic year. Despite many entanglements, I was able to separate what was produced into three overarching themes: (1) dis/connecting to (re)photography; (2) dis/connecting to materiality; and (3) pastpresentfuture(ing). Just as engagements with temporality are replete with fluctuations and gradations contingent on individual perspectives/subjectivities, each of these themes has nuance. In the next chapter, I discuss each theme, the implications of these findings, future research, and present my concluding thoughts.
Chapter 5: Discussion, Implications, Future Research, and Concluding Thoughts

5.1: (Re)Turns of Research

Broadly, this study focused on exploring what was produced by secondary students when they engaged with temporally disjointed visual resources or (re)photographs. Specifically, this study was framed around two main research questions: (1) What does (re)photography expose about secondary students’ dis/connections to the social world? and (2) How do students dis/entangle with spacetimematter(ing)s when exposed to (re)photographs?

To help me analyze/interpret what was produced in the journals and focus group interviews, I employed a thematic analysis (Braun & Clarke, 2006, Leech & Onwuegbuzie, 2007). During this analysis, I (re)read the entire data corpus multiple times, annotating, underlining, and noting my own dis/connections. Through this process, multiple codes emerged. As I continued to (re)read the data, I collapsed many of these codes into broader themes and created several graphic organizers. These themes include: (1) dis/connecting to (re)photography; (2) dis/connecting to materiality; and (3) pastpresentfuture(ing). A fourth (sub)theme was added to the findings section, un/becomings, in order to express un/expected un/developments. I then leveraged these themes into the articulation of three overarching/overlapping findings: (1) (re)photography exposed how secondary students dis/connected to the social world and how they study it; (2) materiality plays a role in meaning-making; and (3) changes to materiality impacts how secondary students conceptualize temporality. These findings were embedded within the entire data corpus and thus (re)surfaced at various points throughout this discussion.
In order to accurately reflect participant’s perspectives, the following discussion remains aligned with the theoretical framework, research questions, review of literature⁴, and themes that emerged from the data set. It was my goal to preserve the perspectives shared by the 21 participants in this study within the context of this inquiry’s purpose of exploring how secondary students use (re)photographs and spacetimematter(ing)s to dis/connect to social world.

5.2: Discussion of Theme 1: Dis/Connecting to (Re)photography

Throughout various phases of this inquiry, (changing) conditions to the (human) body impacted the development of (my) thoughts and exposed how secondary students study the social world. As the physical change to my Mother’s body served as the impetus of this inquiry, varying insights within a bodily context un/expectedly surfaced during this study. This included participants movements/limitations during consumption of each collection of (re)photographs (i.e., expected) and divergent cultural/social entanglements between matter(ing)s, specific groups of people, and (in)equity/justice (i.e., unexpected).

While some participants felt that surrounding themselves with familiar spaces (e.g., bedrooms, family rooms, classrooms) and matter(ing)s (e.g., personal items) allowed for a more relaxed environment in which to reflect/think, consuming the collections in unfamiliar spaces seem to push several other participants thoughts in new (nomadic) directions. As most classrooms consist of standardized chairs, tables, and desks, all students’ bodies are different and thus have different needs when it comes to sitting comfortably in a learning environment. Considering how matter(ing)s related to student seating impacts learning (about the social world), I was surprised to learn that very little research has been conducted around exploring

⁴ There were several instances during this discussion that required specific referencing of literature beyond what was included in my review of literature.
how students physically/emotionally feel about what they are spending hours (upon hours) sitting on.

However, in 2015, Ali et al. conducted a study in Malaysia with intention of evaluating the dis/comfort levels among students throughout their learning process. Using a survey that specifically highlighted dis/comfort levels in different areas (e.g., neck, shoulders, arms, hands, back, knees, feet) of male (213 participants) and female (287 participants) bodies, the findings revealed that most participating students experienced different amounts of discomfort while seated in their learning environment (Ali et al., 2015). While these findings report that most of the discomfort occurs in the upper body (e.g., shoulders, upper/lower back) there were also indications that “anthropometry and gender do have an effect on the student sitting comfortably” (Ali et al., 2015, p. 133). The matter(ing) of the desks is also of importance and it is worth noting that in my classroom, all student desks are made from hard plastic (seat and back) and metal (legs and structure), which certainly cannot be classified as comfortable. This is of particular relevance considering the inseparable entanglements between (student) dis/comfort, engagement, and recollection. Just as each student’s body is unique, so too are their thoughts, pasts, memories, and subjectivities (i.e., ghosts). This particular finding brings into focus the ethicality of physical learning environments and the relationship between these (harsh) spaces and the governance of (abstract) thinking.

According to Cassaday et al. (2002), learning environments that are relaxed and comfortable (i.e., containing familiar odors, music, physical matter(ing)s) stimulated heightened degrees of memory. Granted Cassaday et al.’s (2002) study examined the relationship between matter(ing)s and fact recall, during my inquiry, participants indicated that comfortable surroundings also impacted abstract thinking. Similarly, I noticed a shift in my own thought
patterns depending on where I was working on this study (e.g., home, classroom, airport terminals, airplanes, and coffee shops) and what was in/visibly surrounding me (e.g., music, talking, smells, lights, iPhone, and size of the table). Each environment possessed different challenges and stimulants that factored into the creation of this artifact. Just as the liveliness of a café would instigate short bursts of thought, the hum of the aircraft and extended time during a transcontinental flight—provided I had a seat that allowed me to stretch my legs out—allowed me to progressively think (abstractly) about what was produced during this inquiry. Being someone of ab/normal height (6’8), the relationship between my body and surrounding matter(ing) (e.g., various chairs, stools, and benches) without a doubt impacted my thoughts and the duration of time I would spend during each writing session.

As Woyshner (2006) argued for an approach to working with visuals seeking more focus/attention directed to minutiae embedded within visual resources, this finding should remind (teacher) educators to (re)consider how to make students physically more comfortable/relaxed when working with visual resources and concepts that require abstract thinking. I was not surprised to hear participants mention that having multiple opportunities allowed them to notice “new details,” but by foregrounding the relationship between thinking/noticing and spacetimematter(ing), the results of this study builds upon the work of Berson et al. (2017) which postures that engaging dialogue and aesthetically pleasing visual resources can contribute to a deeper understanding of the represented event/subject. My assumption going into the study was that space(s) do in fact matter, however, I was unaware that these multiple inter/intra-actions—in varying (comfortable) spaces—hold the potential of being leveraged into more complex and abstract conversations about visual resources.
As (most) teachers strive to create lessons that reverberate with students, considerations of spacetimematter(ing) helps cultivate temporal depth/thickness. By frequently returning to each collection—and doing so in varying un/comfortable surroundings—participants were able to conjure memories that continue to (re)shape their unique perspectives. This was evidenced by the depth of the conversation during the focus group interviews. During these conversations, multiple participants spoke about (ghostly) memories they had relating to specific places (e.g., vacation destinations, elementary/high school, work locations). One participant, Morgan, was able to put previously visited spaces in direct conversation with (bodily) matter(ing): “For me, places that I have been to are easier to connect to in my mind. I have been there.” Of all my participants, Morgan was the only student that to reveal that she has traveled outside of the United States. I was not taken aback by this, but her comments added a layer of support to the idea of relationality existing between how secondary students dis/connect to visual resources, temporality, the social world, and their familiarity with physical space(s)/matter(ing)(s). This idea has significant implications relating to the central (environmental) issue framing this study and will be expounded upon later in this chapter (Section 5.6.3).

Through considerations of spacetime matter(ing), participants were able to conjure ghosts/hauntings of the past, thus adding to the complexity and richness of our discussion(s). In simpler terms, when students had more time to inter/intra-act with the resources—in relaxed spaces of their choosing and in which their bodies (e.g., matter(ing)) were (physically) comfortable—the past could saturate the present to a greater extent (i.e., create temporal depth/thickness). Furthermore, the relationality between past and present contributed to future ruminations about hypothetical changes to the matter(ing) of Sugar Hill High (Bluedorn, 2002; Deleuze, 1989; Rydén, 2019). Despite my intention on exploring temporal depth/thickness
through multiple (temporal) rounds of focus group interviews, this surprising finding demonstrates how temporal depth/thickness can be fostered in alternative ways. Rather than waiting two months (Section 3.5.2) to investigate resonance with a second round of focus group interviews, theoretically and pedagogically foregrounding spacetimematter(ing) allowed students’ past memories to permeate our conversations, especially with the context of high school matter(ing)s.

Participants impressed me with their range of thinking about the Cass Tech High Now and Then collection. From the details of the images discussed in focus groups and journals, to the inquiries about in/visible conditions contributing the deterioration of the school (Section 4.1.4), the Cass Tech High (re)photographs clearly resonated with participants. I was fascinated with how Gray illuminated the fact that different bodies have different relationships to surrounding matter and that all educational spaces contain traces (upon traces) of inequity/injustice. This was evidenced by his inquiry into whether or not the school was abandoned due to the student body being primarily comprised of African American students. Thinking from a posthumanist lens can serve as a prism from which we can begin to consider (unexpected) angles relating to the intricate relationships between non/humans and non/physical matter(ing)s. Just as Gray wondered about the relationship between school matter(ing) and the students (of color), might we also ask: How does racism (perpetually) respond and (re)act to matter(ing)s of resistance against it?

For example, following World War II, there was concentrated effort within the American education system to instill tolerance and respect for divergent perspectives/backgrounds. This initiative was known as intercultural educational and thrived in the Detroit public school system during the late 1940’s and 1950’s (Halvorsen & Mirel, 2012). Despite the (re)photographs
exposing a lack of diversity at Cass Tech High School (i.e., most students depicted in the images were students of color), the educational matter(ing) comprising the school could be seen as an act of resistance against racism and educational inequity. As the participant who conducted research into Cass Tech’s past aptly noted, “Cass Tech was like a school for the gods” and included top-tier facilities. However, due to mismanagement of its resources and systemic corruption, Cass Tech High and the entire Detroit Public School system collapsed. Documenting this in a two-hour television report, Dan Rather interrogated this transformational shift in racism noting specifically that “racial distrust has always been strong in Detroit” (Rather & Tyler, 2011).

Further, I was impressed to hear that one female participant—who identified as white—was inspired to expose more information about the facts surrounding the closure of Cass Tech High School. Although she recorded the findings of this research in her journal, she used the findings to push her focus group conversation in new directions. During this part of the conversation, I noticed the participants speaking at louder volumes, indicating their interest and displeasure with events leading to the closure of Cass Tech High School, thus exposing ethico-onto-epistemology, or an understanding of the world contingent on one’s entanglement with it (Barad, 2007). Clearly, (re)photographs contain the potential of instigating (ethical) conversations beyond temporality. As succinctly noted by Quinn, “Perhaps the whole rephotography project would be helpful in helping people think about not just time, but other issues like race relations.”

As (some) educators continue to think/search for ways to cultivate agency with students, thinking about the relationship between space(s), time(s), matter(ing)(s), and visual consumption can create fertile territories of teaching/learning. While Drake and Nelson (2005) posited that a common pitfall of working with visual images is directly related to teacher’s (mis/over)
guidance, based on this inquiry’s findings, when temporal depth/thickness is cultivated in relation to complex visual resources (e.g., (re)photography), secondary students are given the opportunity to braid personal memories with wonderings about ethical/complex issues/circumstances (e.g., inequity, (educational) injustice) and the shifting roles that in/visible, non/physical matter(ing)s play during the process of knowing/be(come)ing.

5.3: Discussion of Theme 2: Dis/Connecting to Materiality

One of most talked about aspects of working with (re)photographs was the various ways in which matter(ing) contributes to meaning-making. Each of the collections took a different approach to expressing materiality, thus impacting students’ ability to dis/connect to specific questions asked during the focus group interviews. My assumption entering this study was that there would be groups of students gravitating towards certain collections based on the content/context, but I was amazed by the diverse ways students formed dis/connections. Asking students about dis/connections (generally) opened-up spaces for them to reflect on their own thought process(es) while simultaneously giving them an opportunity to articulate complex reasoning (Mattson, 2009). Also, I found it interesting that the idea of dis/connecting was interpreted differently by students. For some, this meant identifying similarities between the two juxtaposed images, while others understood dis/connecting to mean something closer to the personal interest level associated with(in) a given collection.

Regardless, participants displayed a penchant for expanding their gaze beyond anthropocentric means. While humans were discussed and reflected upon throughout participants’ (textual/artistical/verbal) responses, the role that other entities play(ed) in the story being depicted in the images came into focus. Moreover, the non/anthropocentric elements in the (re)photographs contributed to the cultivation of discussions teeming with entry points for
(abstract) dialogue relating to temporality. Despite participants saying that “thinking about time is hard because time isn’t real,” the non/human elements in the (re)photographs impacted how students construct meaning.

Priming students to think with the space, time, matter(ing) (Figure 5)—and then later spacetime matter(ing) as an entangled concept—most likely played a significant role in the development of participants’ (intricate) responses. Despite being a complicated (theoretical) concept attempting to make non/sense of out elemental entanglements (Barad, 2011), when I first introduced students to spacetime matter(ing), they displayed high levels of excitement. This includes comments such as “This is so cool,” “This is crazy,” and “Honestly, I have never thought about that.” After working with all of the collections, spacetime matter(ing) resurfaced—as did the word chaos (Figures 5 and 12)—only to be pulled back together/apart into individual concepts. To this point, London “associate[d] one word with each: past being like time, present being matter, and then the future being space.” With this being said, spacetime matter(ing) sometimes led students to a place of (comfortable) uncertainty as Rowan noted during the focus groups that “Honestly, I have no profound thing to say. I am currently fresh out of space, time, and matter-ing. Sometimes you cannot connect the dots.” Accompanying this comment was a simple shrug of the shoulders, indicating contentment with liminality.

Despite this example of being un/able to make non/sense of spacetime matter(ing) within relation to the (re)photographs, overall, I was amazed at the depth of thinking that spacetime matter(ing) provoked throughout the study. Although thinking about/with spacetime matter(ing) occurred disproportionally (Section 5.5), the findings from this study communicate that not only does matter(ing) matter (Barad, 2013, 2010) but the intentionality behind how matter(ing) (d)evolves greatly matters to secondary students. During each of the
focus group interviews, this idea (re)surfaced and undoubtedly impacted how students thought about the future of Sugar Hill High School. Further extending the relationship between memories and matter(ing)—a concept I am calling *material* depth/thickness—participants discussed how changes to matter(ing)s impact how we (will) remember. This was apparent when students reflected on hypothetical situations involving both the (future) abandonment and the revitalization of Sugar Hill High. As Rydén (2019) found that physical entities help people develop a more elaborate relationship to the *past*, the findings from this study indicate that physical entities can also be extremely productive in helping secondary students activate their memories relating to (re)imagining/remembering *future* matter(ing)s (Al-Saji, 2004; Deleuze, 1994, 1989, 1978). All participants in the study exhibited a (physical/emotional) reaction when pressed to consider significant material changes to Sugar Hill High.

This study supports the notion that combining complicated (theoretical) ideas (e.g., ghosts/hauntings, spacetimematter(ing)) with complicated visual resources (e.g., (re)photography) further complicates how secondary students think about entanglements relating to meaning-making and temporality. For example, after talking about how changes to matter(ing) help people make sense of time, one of my focus groups theorized about another form of (bodily) injustice: disciplinary segregation, or solitary confinement. Defined as the “physical and social isolation of [prisoners] who are confined to their cells for 22 to 24 hours a day” (Spector et al., 2019), solitary confinement—as alluded to by River and Roux (both students of color)—can have devastating implications on a person’s mental stability (Arrigo & Bullock, 2008; Camp et al., 2003; Medrano et al., 2017). Offering a perspective on the socialness of people, Spector et al, (2019) mention that:

*Much of our sense of reality, of emotional stability and sense of self derives from fairly constant interactions with other people. Thus, it comes as little surprise that,*
deprived of the crucial source of [temporal] reality, people who are already displaying adjustment difficulties would quickly become even more unhinged from reality in disciplinary segregation. (p. 83)

It is possible that River and Roux took an interest in this aspect of matter(ing) due to fact that African Americans are incarcerated at more than five times the rate of whites (Criminal Justice Fact Sheet, 2020). Regardless, their conversation brings to light another interesting dynamic relating to the relationship between people and their surroundings, beckoning us to think about the people who are responsible for designing spaces that perpetuate (criminal) injustice. To this point, during their discussion about solitary confinement, both River and Roux conjured ethico-onto-epistemology, underscoring the position that “doing (ethico-relationships, being (onto-realities), and knowing (epistemology-knowing, learning) are entangled in the process of world becoming” (Kuby & Christ, 2018b, p. 132).

Interestingly, Michel Foucault (1975)—a white, male poststructuralist—(re)imagined the prison with his vision of the panopticon which (re)arranges cells so that prisoners can be observed at all times from all angles. As this architectural design seeks to reverse “the principle of the dungeon, or rather of its three functions—to enclose, to deprive of light and to hide” (Foucault, 1975, p. 200), Foucault’s vision—despite being conceptualized in the past—fails to account for (future) demographics of people unjustly and disproportionately populating the prisons and how (all) people need to experience changes to matter(ing) in order to maintain a sense of mental/emotional/physical stability.

Further, in an open letter to prison designers, Spector et al. (2019) called upon fellow prison architects to “foreswear designing facilities for long-term solitary confinement and for the administration of the death penalty on the concept that these punishments amount to human torture” (p. 82). Although this call may be noble, I cannot confirm—from a demographics
standpoint—who is represented within the correctional architectural community. Thinking from the axiom that prisons are physical and structural manifestations are injustice, how would racism adapt to such a repurposing of material conditions and planning? Just as Bex—who identifies as white—mentioned how problematic it is to deprive humans of materially processing time during Roux and River’s discussion, might we also ask: To what end can spacetimematter(ing) and ethico-onto-epistemology be employed during the design/creation of physical spaces to promote greater degrees of rehabilitation, education, and justice? And, in what ways can temporal and material depth/thickness (i.e., past/present criminal-orientated apparatuses and injustices) be leveraged into a (re)imagining of the (future) criminal justice system that is less racist, less inhumane, and more temporally/materially responsible?

The conversation about solitary confinement continues to haunt me and demonstrates the extraordinary range of secondary students’ thinking when presented with sophisticated/non-linear visual resources and complex theoretical concepts.

5.4: Discussion of Theme 3: Pastpresentfuture(ing)

Whereas Barker (2011) noted that digital technologies can be useful in exploring intrastitiously temporal spaces, Crane (2013) reminds us that “[i]nvisible ingredients of [re]photographs, their formal elements, are inextricably entwined in their representational capacity” (p. 63). Based on society’s fascination with ghosts/haunting, through book/movie titles and popular culture trends (Trefzer, 2013), I assumed going into this study that participants would demonstrate a proclivity towards the final two collections expressly introducing ghosts/hauntings. Although this assumption turned out to be incorrect—the argument could be made in favor of the Cass Tech High collection resonating the most with participants—secondary students unquestionably embraced ghosts/hauntings and leveraged their
presence/absence into explorations of how materiality changes and thus influence conceptualizes of temporality.

During her study of closed public schools on the Southside of Chicago, Ewing (2018) found conjuring ghosts to be productive in thinking about the substantial entanglements existing between communities and physical (educational) spaces and how ghosts/hauntings can help foster healing from the “indelible emotional aftermath” (p. 127) of a school closing. Indirectly, this study builds upon Ewing’s (2018) work as students were provoked into considering/processing future affects related to hypothetical (physical) changes to Sugar Hill High (Section 5.3). Despite the temporal way in which Ewing (2018) conjures ghosts to heal (i.e., conjuring ghosts of the past), this study used ghosts/hauntings to contemplate future (material) histories. Considering the logic of presentism (Bigelow, 1996; De Clerq, 2006; Sider, 2001), this study introduced students to an iteration of time that values the (unknown) future, thus disrupting the limitations of only focusing on the present (Wineburg, 2011). Perhaps, an iteration that is best categorized by the composite concept of presentism/eternalism (Section 1.6.7).

In a similar context, by bringing into focus the traces (upon traces) and (perpetual) returns of history/ies (Derrida, 1993b), working with ghosts/hauntings stimulated participants thinking about the cyclical nature of time and its relationship to spaces/matter(ing)s. Reflecting back on this study, I am (still) astonished by Lane’s comment on how (all) matter(ing) “contains history and has the ability to speak. However, we just can’t translate.” This comment parallels Kalin’s (2013) position that taking a hauntological position unsettles traditional orientations relating to people, places, and matter(ing)s while also disrupting how people remember the
pastpresentfuture(ing). I believe the idea of translating (historical) physicalities is exciting and discuss its potentiality for garnering future research later in this chapter (Section 5.7).

Despite the benefits of working with ghosts/hauntings, I acknowledge that they have social/cultural limitations stemming from their Euro-Centric origins. As such, I am interested in using other conceptualizations of in-between-ness to explore how teachers/students think about temporality. For instance, how might teachers/students apply principles from physical acts of conjuring, such as the Indigenous ceremonially performance Ghost Dance? During this collective of rituals, Indigenous community members move in a circular fashion, intent on communicating with past/future tribal constituents in an act of resistance against (interminable/contemptible) acts of coloniality (Figure 13) (Eagle, 2000; LaMothe, 2019; Mooney, 1973).

Figure 13. Muhr, A. (c. 1898). Ghost dance-Cheyennes & Arapahoes [Photograph].
As another possibility, realms of in-between-ness are well represented in various Latinx cultures (Villa, 1999; Zembylas, 2013) and perhaps can offer an alternative (ghostly) approach to future explorations into the relationship between (bodily) temporality and materiality. In many parts of Mexico, between October 31st and November 2nd, (living) people get together to honor and remember (nonliving) family members. This celebration, known as *Día de los Muertos*, includes festivals, prayers, musical performances, and personal matter(ing)s. Specifically, it is common practice to set up a shrine or memorial known as an *ofrenda* (Figure 14) filled with items (e.g., candles, flowers, food, (lace-like) cutouts, objects, pictures, and skulls) that once resonated with past family members (Congdon et al., 1999).

![Figure 14. Rainnie, F. (n.d.). Day of the Dead in Ocetopec [Photograph].](image)

Recently, Monreal (2019) explored using the *ofrenda* in an educational space to create an “ultra-visible expression of Latinx culture that served to facilitate greater [cultural] understanding and lasting conversation” (p. 122). During this inquiry, Monreal’s (2019) students
used commonplace classroom materials to create an ofrenda and discussed the importance of this tradition to Latinx culture. Building upon Monreal’s (2019) demonstration of cultural matter(ing)s, the idea of ofrenda can be further used as a conduit for conversations with students relating to how matter(ing)s are (forever) entangled with memories of (once-living) people (i.e., material depth/thickness) and how other cultures lean into matter(ing)s to help make sense of pastpresentfuture(ing) memories and knowings/be(come)ings of the social world.

The idea of that history repeats itself (re)appeared several times during the focus group interviews (Section 4.3.4). Using the (re)photographs, participants talked about the ways in which various matter(ing)s return, albeit often in different forms. This included how physical spaces get (re)built and how sometimes these spaces can facilitate the conjurings of emotions within the context of historical injustice. I found Roux’s (ethico-onto-epistemological) observation of one of the (re)photographs in the Civil War Then and Now collection to be especially interesting. In that specific (re)photograph, an image of white Confederate soldiers and women taken on the steps of General Robert E. Lee’s house circa 1862 is merged with a group of visiting students in 2015. Speaking about the smiles on white students’ faces compared to the dismayed expressions of two Black girls, Roux indicated an understanding how matter(ing) perpetuates the cyclicity of time and emotions, despite shifts occurring with the purpose of the matter(ing).

Whereas several white participants in during my focus groups interviews discussed the return of buildings and other non/human elements represented across the four collections of (re)photographs, Roux’s perspective was/is undoubtedly informed by the history of inequity, inequality, and injustice towards Black Americans in the United States. These observational differences underscore Rose’s (2016) call for a critical approach to visual methodologies,
specifically accounting for the idea of audiencing, or the “the process by which a visual image has its meaning renegotiated, or even, by particular audience watching in specific circumstances” (p. 38). I understand Roux’s ethico-onto-epistemological/observational comments to be a rejection of the (white) inter/intra-actions with the historical matter(ing) of Lee’s house occurring in the modern image. Further, from Roux’s perspective that illuminates the different reactions of the students, we might ask: If the matter(ing) surrounding the Lee’s house was different (i.e., textual information, the inclusion of matter(ing) related specifically to racist ideologies), would there be an interruption in the cyclicity of time and emotions felt?

Luke, Jordan, and Justice also discussed ways that the cyclicity of time is constantly in a state of (d)evolution. This idea is works alongside Roux and River’s conversation about changes to the purpose the matter(ing) and signifies a perspective of time that destabilizes the eternalist position that the future is predetermined and unchangeable. Taking up Derrida’s (1993b) vantage point that “the singularity of any first time, makes of it also a last time” (p. 10), I ask: Is it ever possible for history/ies to (fully) repeat? And, to what end can ghosts/hauntings—returns of history/ies and injustices—help us to (re)shape and (re)imagine the future (inter/intra-connected and social) world in a way that is more socially, culturally, and materially just?

5.5: Discussion of Un/Becomings

The findings from this inquiry indicate the need for more work with flattened concepts (e.g., spacetimematter(ing) and pastpresentfuture(ing)). While students were primed with spacetimematter(ing) (Section 3.4.2), these concepts were pulled together/apart in a way that reoriented the emphasis of each concept, thus restricting the relationship between terms. Reflecting back on the primer lesson, perhaps I could have separated the two approaches (i.e., space, time, matter(ing), and spacetimematter(ing)) or (re)arranged them (i.e.,
timematterspace(ing)) in way that could have allowed participants to see/acknowledge conceptual differences/similarities. Put another way, it would be interesting to explore how these variegated uses of space, time, and matter(ing) impact students’ engagements with (re)photographs and how they study and make meaning of the social world.

Further, based on the findings from this study, I believe there is more room to further trouble the (irrevocable) relationship between the past, present, and future. While engaging with (re)photographs exposed how secondary students conceptualize temporality, each of the collections of (re)photographs focused specifically on past and present. As mentioned previously (Section 4.4.1), adding a participant-generated third layer to the (re)photographs could contribute to flattening of pastpresentfuture(ing), thus strengthening the (ghostly) entanglements and temporal implications.

Seeing how frequently secondary students use their cellular phones to capture photographs, I was shocked that none of the participants in this study included them in their journals. However, this un/becoming brings into focus the limited way that (some) teachers expect students to articulate abstract ideas. Further, my assumption regarding secondary students’ willingness to take and include photographs clouded the fact that a majority—if not all—of participants of this inquiry were enrolled in the visual performing arts program at Sugar Hill High. Perhaps these students would have preferred a performative approach to the articulation of (intrastitial) abstractness. As such, and as an extension of the primer lesson, I could have introduced participants to the Indigenous Ghost Dance and offered/encouraged them to articulate abstractness through bodily movement.
5.6: Implications

The implications of this study are both broad (education) and specific (social studies education and environment). I unpack each of these themes in this section as well as provide several recommendations.

5.6.1: Education. In a broad sense, the findings of this study impact education as a whole. All levels of education take place in (various) spaces, filled with (assorted) matter(ing)s, and are governed by temporal constrictions (Bender & Wellberry, 1991). As secondary students clearly demonstrated throughout this inquiry, illuminations of space(s), time(s), and matter(ing)(s)—spacetimematter(ing)(s)—have a crucial ethic-onto-epistemological function. Considering my (entangled) role in this exploratory process, spacetimematter(ing)s also significantly impacts how leaders of knowledge acquisition (e.g., educators/researchers) navigate their own role throughout the educational process. Having been a public-school educator for close to 20 years, I have observed countless changes/trends/approaches to education. Despite this, one thing has remained a (vexingly) constant: teachers never have enough time to process/reflect on their practice or engage with/in relationship buildings exercises with their students outside of classrooms.

As such, I recommend that all levels of education factor in (reoccurring) moments of classroom culture building that occurs in different spaces. I believe this holds the potential to unlock meaningful relationships for teachers, students, and other community stakeholders. This recommendation works together with Davis’ (2003) notion that, “teachers [are] portrayed as determining the quality of their relationships with students through their use of physical space (e.g., open vs. traditional classrooms)” (p. 207). These events should take place in a variety of spaces at different times during the school year and include an assortment of matter(ing)(s)
meant to foster dis/connections between participating members. Ideally, the spaces used would include starkly different constructed/natural environments. As students demonstrated in the dialogue(s) about matter(ing) related to the Cass Tech High Now and Then collection, perhaps these inter/intra-actions should include images or items that were commonplace in classrooms when teachers/stakeholders were of similar age. In this way, dimensions of temporality and materiality (e.g., temporal and material depth/thickness) would be layered into the conversations. Further, these temporally divergent items could then be used to foster rich and meaningful conversations, a necessity for the development of trusting, respectful, and productive relationships (Ryan & Patrick, 2001).

Along with using common (educational) matter(ing)s to foster deeper relationships, the findings from this inquiry should remind educators of the power and possibility that (historical) matter(ing) holds and the various ways that students dis/connect, interpret, and process the history, intentionality, and purpose of (public) matter(ing)s. As Roux reminded us, certain settings and matter(ing)s will conjure up different emotions and elicit variegated (re)actions. Every (public) engagement with matter(ing)—especially matter(ing)s used to conjure mis/representations of history/ies—is an for opportunity for teachers/students to cultivate multi-perspectivity and ethico-onto-epistemology through the consideration(s) of social in/justice. Further, and as a way of promoting anti-oppressive education by saturating (representational) matter(ing)s with diversified historical perspectives (e.g., material depth/thickness), I recommend teachers pairing (public) matter(ing)s with the following provocations: (1) Whose history/ies does the matter(ing) benefit/preclude? (2) To what end is the matter(ing) responsibly representing multiple perspectives of its intended (historical) phenomenon? (3) What
amendments could be made to the space(s) and/or matter(ing)s being used to cultivate empathy/intuitiveness towards (re)occurring and divergent interpretations/understandings?

**5.6.2: Social studies education.** We are living in a visual word and the need for fostering visual literacies is important. Defined as the capacity to consume/process/analyze imagery from a critical perspective (Alter, 2019; Merse, 2015; Rose, 2016), as various elements of this study show, visual literacies can be leveraged into dynamic conversations about difficult and complex topics, such as temporality, materiality, and social in/justice. Considering the rich nature of social studies education and the frequency of visuals used to (artistically) illustrate cultural practices, geography, history/ies, and technologies, cultivating/refining these skills is paramount to fostering higher-order thinking in learners with varying degrees of (English) language proficiency (Brophy, 1990; Hinde et al., 2011; Reutebuch, 2010; Spzara & Ahman, 2006). With that being said, working with (re)photographs challenges all students to (re)think the relationship(s) between non/human matter(ing)s and how the (d)evolution of these relationships significantly contribute to processes of meaning-making. The (temporal) complexity of (re)photographs also foregrounds the idea of visuality, or “the ways in which both what is seen and how it is seen are culturally constructed” (Rose, 2016, p. 3).

Further, this study demonstrated how visualization tools can be used to help illustrate complicated information. As previously mentioned in Chapter 4, due to the intricate nature of what was produced during this study, I grappled with delineating themes and patterns. However, by (re)arranging codes and expressed concepts visually (Figure 6) I was able to clarify my thinking while also graphically depicting information for others to understand (Berson & Berson, 2009, p. 126). This (re)occurred when I used digital tools to help me articulate my understanding of how participants conceptualized the return of history/ies (Figure 12). If I could go back to the
past and make one change to this study, it would be to cultivate visualization tools with my students beforehand to help them further articulate their thoughts within their journals. I am inclined to believe—based on my own experience using visualization tools during this study—that these visual articulations/representations could have helped engage several of the participants who remained quiet throughout the focus group interviews and further contributed to complexification of what we discussed.

The findings from this study builds upon existing research exploring how digitized primary sources can be used in social studies classrooms to develop critical thinking skills and expand students’ perspectives about the past, present, and future (Berson & Berson, 2016; Schocker, 2014; Woyshner, 2006). It underscores the importance of taking a systematic approach to using visual resources to improve analytical/observational skills. Working with (re)photographs slowed students’ consumption of the visual images down, encouraging deeper dis/connections to various components in images. These skills were further cultivated by allowing students to make (agential) decisions relating to how/when/where they were able to engage with each collection of images. If social studies educators wish to get more out of visual resources—with the hopes of fostering more dynamic conversations about what is/not being represented in the image(s)—then more time needs to be given in various spaces. Accordingly, I recommend that social studies teachers (re)think the parameters used to outline engagements with visual primary sources. Rather than giving students individual images, teachers can create collections that intentionally/methodically progress in terms of complexity and include inter/intra-active images that further add to the (richer) development of an event (Berson et al., 2017).
Further, perhaps attempting to answer Brown’s (2003) call for (re)new(ed) ways of developing visual-ness within educational spaces, I also recommend that teachers make talking about temporality a priority with *every* engagement of visual resources. While the participants in this study were secondary students, it is my perspective that thinking with spacetimematter(ing) can be productive at the elementary level and can offer teachers/students a new (theoretical) lens from which to consider ideas relating to the pastpresentfuture(ing). Put another way, and embracing the notion that time is ubiquitous and penetrates any/all narratives (Currie, 2007), temporality and materiality should be (re)prioritized in all pedagogical moves seeking to use visual resources. While Berson et al. (2017a) note that “using primary sources [(i.e., texts and visual)] in the classroom actively engages students in interpreting the mystery of the past” (p. 430), this research suggests that this idea should be pushed further by way of putting the past into direct conversation with the present and future.

When provided with multiple opportunities to work with (re)photographs, in spaces of their own choosing, participants’ imaginations were activated and led them to wonder about elements that were not present in the image. In this Baudrillardian way, participants took each image within every collection as an entry point for a narrative that not only had already occurred, but one that is (forever) unfolding. Approaching the (re)photographs this way led to complex conversations about the social/political forces at play, thus leading to discussions within the context of social in/justice.

Along with (re)focusing on temporality with visuals, I suggest that teachers also (re)image how visuals can be used to erode traditional demarcations of time. Considering the non-existence of research (visually) operationalizing ghosts/hauntings within the context of social studies education, this study exposed how ghosts/hauntings can be highly productive in
nurturing thinking/articulations about temporality and materiality in a fluid sense. Thinking with ghosts/hauntings undoubtedly pushed participants thinking to consider how the return of non/human aspects of the world can help us (re)think/(re)conceptualize the inter/intra-connected (social) relationship(s) between the past, present, and future (Kleinberg, 2012). Returning NCSS’s (2010) position on the goal of social studies being “to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world,” the findings from this study suggest that adopting a worldview that embraces ghosts/hauntings can help teachers/students leverage past matter(ing)s to contemplate the implications of future decisions being constructed in the present. As such, I call on educators to use ghosts/hauntings to further develop/complexify student’s relationships to the past/present/future(ing) (social) world(s).

This can be done by having students create their own collections of three-tiered (re)photographs (i.e., images of the past/present and drawings of the future) or presenting them with visuals that (in/directly) put the past in conversation with both the present and future. Also, I recommend that teachers (invariably) remind students that there are traces (upon traces) of the past existing all around us containing invaluable history/ies that can conceivably help develop more intricate and entangled (future) dis/connections. Just as I argue that these (ghostly/haunted) findings carry significant consequence to (social studies) education, they also unveiled several (exciting) opportunities for future research (Section 5.7).

5.6.3: Environment. According to Tsing, et al. (2019), we are all living on a damaged planet with ghosts/hauntings “that are traces [upon traces] of more-than human histories through which ecologies are made and unmade” (p. G1). As stated at the beginning of this dissertation (Section 1.2.1), approaches to (social studies) education that are strictly anthropocentric severely
thwart students’ ability to think about time and temporality in a manner that is fluid (Wineburg, 2011). This is extremely problematic and has (dire) consequences the environment. When students are not presented with opportunities to think/process the complexities of time and temporality, they cannot envision the consequences and entanglements of present/future actions relating to other non/human entities.

The results of this study indicate that using (re)photography as well as concepts of spacetimematter(ing) and ghosts/hauntings extend secondary student’s gaze beyond strictly humanist trappings and contribute to a conceptualization of the future that is pliable. I acknowledge the inseparability between non/humans and other worldly matter(ings) and suggest that (re)photography, spacetimematter(ing), and ghosts/hauntings can help teachers/students bring into focus the manifold complexities embedded within all surrounding relationships. Accordingly, and as these resources provoked thinking about the ways that matter(ing)s transformed with/over time, I am encouraged by the potential of (re)photography relating specifically to the transmogrification of non/human, living matter(ing)s. Put differently, I believe (re)photography offers way for teachers/students to visually engage with how environments have deteriorated because of (Eurocentrically) anthropocentric decision making.

For example, the United States has a long history of reshaping landscapes to (re)direct and assert control of water (Figure 15).
While these efforts include—in some cases—flood control and water accumulation, the manufacturing of these waterways has drastically impacted life for nonhumans (e.g., flora and fauna) and (non-Western) humans (e.g., Indigenous Nations). Reflecting on this form of environmental mastery and the economical intentionality, Gilio-Whitaker (2019) says:

But while dams were contributing to American prosperity, and at times provided benefits to Native communities (jobs and eventually economic development and recreational opportunities), their net effect in Indian country has historically been disastrous, particularly throughout the twentieth century. Those impacts range from population displacement to environmental disruption so extreme that subsistence livelihoods were eliminated, which in turn has reflected in negative health outcomes for tribal communities and ongoing trauma. (p. 60)

Considering the availability of digital photographs (e.g., Library of Congress) and free online photo-editing software (e.g., Pixlr, GIMP), perhaps teachers/students can create their own locally themed collections of (re)photographs with the intention of examining how the environment has changed and e/aected all surrounding non/human matter(ing)s. Further, teachers/students can use the fundamental principles of spacetime matter(ing) (i.e., surrounding relationships) and ghosts/hauntings (i.e., engaging with the return of history/ies) to contemplate the future of the
inter/intra-connected (social) world. This posthuman and poststructuralist approach to using visual resources echoes the sentiments Braidotti (2019), who reminds us that “we cannot solve contemporary problems by using the same kind of thinking we used when we created them” (p. 122).

5.7: Future Research

This qualitative inquiry exposed what was produced by secondary students when they engaged with temporally disjointed resources. Opportunities for further research include using related (re)photographs with elementary school students to explore how they conceptualize entanglements of past, present, and future. I hope that this inquiry inspires other (future) researchers to take up (non-linear) temporal lines of flight and consider other applications of spacetimematter(ing) and ghosts/hauntings.

Despite both (theoretical) postures being relatively (re)new(ed) in education(al) (research), it is exciting to think about the possibilities. For example, spacetimematter(ing) and ghosts/hauntings could be applied to research seeking to learn more about how students use field trips or other out-of-classroom experiences to process history/ies. To this point, I argue that spacetimematter(ing) and ghosts/hauntings can help teachers/students challenge the (physical) demarcations of history/ies present/absent within spaces outside of the classroom. As I have referenced several times in this chapter, Lane’s comment about matter, speaking, and (not) translating continues to haunt me.

Combining this thought with the other participants’ questions about what/which history/ies get(s) to be reflected (Figure 9) throughout societal spaces, I believe that future research is needed into the power dynamics, or mastery, over/behind the conjuring of public and private ghosts/hauntings. In this way, I am interested in answering Ewing’s (2018) call for
operationalizing ghosts/hauntings within a social in/justice context (i.e., ghost stories as counter-narratives). As noted by Cixous (1986), “mastery is everywhere […] and] ra[(n)]ges between classes, people, [histories,] etc., reproducing itself on an individual scale” (p. 78), such inquiries might be mis/guided by the questions: (1) What is produced by students when provoked with the idea that mastery over history/ies is everywhere and nowhere at same time? and (2) To what extent to physical demarcations of history/ies limit our thinking about pastpresentfuture(ing)?

Further, drawing inspiration from Singh’s (2018) notion that “mastery is a concept that is situated at the threshold of matter and narrative” (p. 17), we—as researchers—might ask: How does mastery over spacetime matter(ing)s shape the (forever) unfolding of pastpresentfuture(ing) narratives? Although this range of these questions requires (abstract) thinking skills perhaps best suited for secondary students, they could also be useful in helping pre-service teacher(s) (educators) reflect on their own institutional experiences and the formation of their teacher identities within a bodily, temporal, and material context.

Unfortunately, and as mentioned previously (Section 3.5.2), changes to (microscopic) spacetime matter(ing)s cut short one specific aspect of this study: exploring temporal depth/thickness with multiple rounds of focus group interviews. On March 17th, 2020, Florida governor Ron DeSantis shut down all Florida public schools until April 15, 2020 in an attempt to mitigate the spread of the coronavirus (Calhoun, 2020). The uncertainty of this pandemic and its (educational) implications are at present, unknown, but disruptions caused by the spread of the coronavirus have disrupted/ altered life for most—if not all—people living on Earth. Just as Kansas has decided to cancel school for the remainder of the academic year, several other states (e.g., California, Ohio, and New Jersey) have openly discussed a similar response (Holcombe, 2020). Accordingly, and with the guidance of my dissertation committee members, I let go of the
second round of focus group interviews, scheduled for the beginning of April. The purpose of this second round of focus group interviews was to gain a better understanding of the post-entanglements experienced by secondary students two months after their original engagements with four collections of (re)photographs.

When asked to consider (future) hypotheticals about their school (Section 4.2.2), participants seemingly could dis/connect the Cass Tech High collection—including images from 1970’s and the 2000’s—to some future 20 years from now. This hints at the relationality between the understanding the past and contemplating the future (Bluedorn, 2002; Rydén, 2019) further suggesting the need for more research. Considering Deleuze’s (1989) dis/connection between memory, nostalgia, meaning-making, and resonance, it would be important to further explore how temporal and material depth/thickness impacts the way students construct relationships to memories of the past, present, and future (matter(ing)s).

Moreover, and relating to the abrupt stoppage and (home) relocation of educational activities due to the coronavirus, a framework constructed around tenets of both temporal and material depth/thickness would be useful in investigating if/how history/ies repeat within the context of memories and surrounding (home) matter(ing)s. Such (ethico-onto-epistemological) studies hold the potential of helping (re)shape how students learn and think about the past/future and further, co-depend on the (shifting) nature of (virtual) spacetime(matter(ing)s) to remember their secondary experience(s). Recently, Kuby and Christ (2018a) applied spacetime(matter(ing)) to the development of a qualitative inquiry course. Despite working with graduate students, Kuby and Christ’s (2018a) findings harmonize with the findings of this study and my position arguing for (theoretical/pedagogical) explorations into temporality and matter(ing) to help
advance our understanding of how teacher(s)(educators)/students dis/connect to the (forever) changing, social world.

5.8: Concluding Thoughts

This study exposed the myriad of ways that secondary students used (re)photographs to dis/connect with/to topics relating to (injustices of) the past, present, and future (social) world(s). Specifically, findings included: (1) how secondary students dis/connect to the social world and how they study it; (2) materiality plays a role in meaning-making; and (3) changes to materiality impacts how secondary students conceptualize temporality.

While many participants demonstrated an increase in observations/analytical skills, others used the four collections of (re)photographs as a conduit for abstract interpretations. This was evidenced by responses/dialogues regarding the intentionality of changes to matter(ing) (Section 4.2.2), entanglements of memory/matter(ing) (Section 4.2.3), intrastitial territories of time (Section 4.3.3), and the cyclical nature of history/ies (Section 4.3.5). Priming students to think with an elaborate (theoretical) concept such as spacetimematter(ing) (Figure 5) helped complexify the ways in which participants conceptualized time, temporality, and materiality. Working with the terms space, time, and matter(ing)—first separately, then as one fluidly single concept—prepared participants to the consider various present/absent relationships depicted in each collection of (re)photographs.

In 1999, Wineburg asked, “Why study history at all?” (p. 488). As educators continue to grapple with how best to address this question, perhaps the answer lies within (cyclical) (re)turns to the future. When teachers/students account for un/en-foldings of the past and the (unjust) conditions that shaped them—as participants theorized—the future remains fluidly kaleidoscopic. From this axiom, greater understandings of the past and its relationship to the
future will contribute to the way that students “study how the past shape[s] the conclusions we draw” (Chapman, 2011, p. 96). Just as the (social) world is showing signs of distress from human decision making, a (re)new(ed) future is (forever) possible.

Perspectives (re)shaped by posthumanism and poststructuralism are useful in thinking about the contradictions and paradoxes of what it means to be human. Just as this study set out to temper anthropocentrism in social studies education, it was obvious—throughout all phases of this inquiry—that the (human) body plays a pivotal role in the fabrication of meaning. Despite this, and according to Rose (2016), “digital technologies invites a different way of thinking about how we are human” (p. 9) and how humans dis/connect to (pastpresentfuture) surrounding materialities. Further, (re)photographs that challenged traditional demarcations of time provoked (re)new(ed) ways of thinking about temporality and materiality while also illuminating the inter/intra-connectivity existing between (pastpresentfuture) non/human entities.

Closing my eyes, the ghost of my present infiltrates my mother’s hospital room of the past. The room is now empty, except for Mom who is resting comfortably. The machines adorning the walls are humming in unison. They are no longer red, but purple, blue, orange, and green. Several cords are snaked along the metallic bed rail, but resist touching Mom. While Jackson and Mazzei (2012) remind us that plugging in within the context of research can “produce something new…a constant, continuous process of making unmaking” (p. 1), at this point in my remembrance, Mom is no longer a “fabricated hybrid of machine and organism” (Haraway, 1995, p. 12). My thoughts drift to the window bifurcating inside from out. I wonder about the environmental implications of each component used to create of this structure and what (always) was before its construction. What are the ghosts/hauntings of this land and what technologies and machin(ation)es were used to clear it? What does the future hold for this
land/neighborhood? How long before the tendrils of gentrification arrive/depart? To what end is ethico-onto-epistemology—towards (a) future world(s)—considered/shunned by the organizations employed for geographical and environmental rearrangement/commodification?

Slowly, each of the walls begin to disappear. The squared tiles (re)turn to dirt and the space gradually becomes (re)populated with wildlife. Here, bears, bobcats, butterflies, elk, condors, foxes, ravens, sea otters once co-existed before their indigeneity was eradicated. Beneath the sprawling grass/wetlands, fingers of limestone, magnesite, and carbonate provided the abundance of minerals necessary for the presence of bounteous landscapes. Farther in the distance and closer to the coastal waters, a small (spectral) group of Ohlone children start throwing oyster shells at each other. Laughter fills the air, along with faint bark from a rookery of sealions. Without warning, a gunshot cracks, ma(r)king the arrival of a new, yet contaminated, presence and matter(ing). The colonizers have arrived, their boats—responsible for the harvestation of innumerable European maple and pine trees/forests—now adorning the distant shores. Ohlone women dig in the ground, chains limiting their movements, while Ohlone men, robotically stack mudbrick after mudbrick after mudbrick, skyward. A coughing missionary releases carcinogenic pathogen(s) into the air choking out countless lifeways (e.g., flora/fauna, cultures, people).

Suddenly, the topography twitches. Buildings, neatly stacked now adorn the paved network of roads cutting across the land. Grey landscapes replace the swaths of green, brown, and blue that once existed. Cars, trucks, vans, and motorcycles line the streets and several people navigate the darkness with iridescent technologies. The sun is slow to rise, but nevertheless, begins its ascent. Without warning, the Earth begins to violently shake. Buildings crumble effortlessly as the San Andreas Faultline—extending close to 1,000 miles through California—
slips horizontally beneath the crust. In my hauntological state of mind, I think about the bodies of critters before a significant natural disaster occurs, such as the San Francisco earthquakes of 1909 and 1989, and their sensibilities relating to what is to (be)come. With each unfolding of destruction, more materials, more matter(ing) is accumulated, harvested, desired. Burrows are repaired and hives are (re)constructed. Piers are rebuilt, windows replaced, technologies are developed, and future (re)orderings are (re)mapped over existing landscapes. With(in) the destruction, ephemerally, all boundaries become blurred.

My thoughts are now observing a (future) teacher candidate deliver a lesson in a classroom. The (reoccurring) lesson is seeking to honor the (pastpresentfuture) lifeways and identities of each student. Students are smiling and beaming with pride as they conduct (ethico-onto-epistemological) research into matter(ing)s that matter to the sustainability of their family’s culture while also making note of hardships that have been (historically) navigated and the (physical) way(s) their culture(s) have been remembered/demarcated in public spaces over time. The classroom contains students busily working/researching/collaborating not in/on ordered rows of desks, but rather, alongside a variety of cushions, tables, mats, and rugs. Suddenly a bell rings, signifying a school-wide transition to “environmental engagements” (my term). The remainder of the day will be spent focusing on various aspects of local ecological justice, including the writing of petitions and reports aimed at illuminating the impact of local business-related practices and the various ways in which resources are accumulated, allocated, consumed, and distributed.

Despite the idea that “people are trapped in history and history is trapped in people” (Baldwin, 1955, p. 2), “it takes work to make ghostly entanglements [in]visible” (Barad, 2007, p. 9). Adopting a hauntological perspective frames history/ies in a way that becomes more
dis/connected through the exposure to (in)visible traces (upon traces) of past, present, and future non/human entanglements (Derrida, 1993b). Thinking from this perspective is to trouble past beforings and future potentialities of the social world(s). When we think this way, unfamiliar/exhausted terrains of knowing/be(come)ing are (un)mapped, (un)settled, and (un)veiled.

Working with (re)photographs offers pedagogical advantages as well as the opportunity for teachers/educators to work with an (ghostly/haunted) iteration of time and temporality that is blurred, unstable, and that informs how humans (re)shape, (re)interpret, and (re)make assorted relationships with non/human matter(ing)s (Barad, 2015, 2012, 2010, 2007, 2003; Gordon, 1997; Kleinberg, 2013, 2012). Thus, I am optimistic such relationships and temporal entanglements may ultimately result in greater degrees of future social/cultural/ecological culpability, equity, justice, responsibility, and tolerance. After all, and as Tsing et al., (2017) reminds us, “our ghosts[hauntings] are the traces [(upon traces)] of inter/intra-connected histories through which ecologies are [(re)made and unmade” (p. G1). When we pivot away from linear/conventional conceptualizations of space, time, and matter(ing), and education for that matter, the possibilities may become measureless and the end—as we know it—can be (forever) over.
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Appendix A: Assent Form

Assent of Children to Participate in Research

Title of study: Historical Connectivity: Exploring Students' Perceptions of Temporality

Why am I being asked to take part in this research?

You are being asked to take part in a research study about the use of (re)photographs to interrogate how temporal (relating to time) and historical elements are connected. Specifically, this research seeks to explore what is produced when participants engage with time-related resources that are disjointed. These images are called (re)photographs and present a visual reference to subjects that have been photographed at various periods of time. If you take part in this study, you will be one of about 20-30 people at this site. This research will occur in Bretton Varga’s classroom during [time].

Furthermore, you are being asked to take part in this research study because you are enrolled in Bretton Varga’s Global Perspectives course and have already demonstrated an ability to think creatively and abstractly.

Who is doing this study?

The person in charge of this study is Bretton Varga. He is being guided in this research by Dr. Michael Berson. However, other research staff may be involved and can act on behalf of the person in charge.

What is the purpose of this study?

By doing this study, we hope to learn how students make connections to, with, and about the past, present and future. We are also interested in learning the role that space (surroundings), time
Where is the study going to take place and how long will it last?

The study will be take place at Booker High School. You will be asked to participate in approximately six visits that will take about 45 minutes each. The first five visits will occur in consecutive weeks and then you will be asked to participate in a visit two months later. This is intended to help us better understand what from the process resonated with you. Along with this, you will be asked to make three journal entries per collection (12 total) on your own time in a journal that will be provided. The journals will be collected at the end of each week following your engagement with each collection of resources. There will be two extra-credit points given for each journal submission (8 total). The total amount of time you will be expected to give to volunteer for this study is approximately six hours.

What will you be asked to do?

This study involves engaging with time-related resources. If you take part in this study, you will be asked to:

- Engage with (re)photographs that compare and contrast two historical locations at two different points in time.
- After being introduced to the collection of (re)photographs, you will have about 30 minutes to begin exploring them, looking at ways in which all elements in the image are connected (past-present-future).
- The remainder of class time will be allocated towards having you respond both textually and/or artistically to the following prompt: **How are all elements depicted in the (re)photographs connected?** Each of the four engagement sessions with the (re)photographs will include the same prompt. All responses will be made in a journal that is provided.
- You will be asked to take the journal home and make at least more three entries per collection. The total number of expected journal entries for the entire study is 16 (one in-class and three outside of class entries per week). As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. You may wish to use these photographs during the focus group interviews to help further the conversations. The journals will be turned in each Friday and redistributed the following Monday, using a numbering scheme to help you locate your journal. The journals will be photocopied and returned to you for keeping at the end of the school calendar (May 20, 2020).
- In summary, each session of the four engagement sessions will consist of: (1) 3-5 minutes for introduction, (2) approximately 30 minutes for (re)photograph engagement, and (3) approximately 10 minutes for textual/artistic/photographic responses.
- After the last engagement session, you will be asked about your experiences in two semi-structured focus group settings. A focus group is a small group of 6-8 participants and it is called semi-structured due to short list of questions that have been prepared. This allows us to
explore topics that may come up during our conversation. The first of the semi-structured focus group interviews will occur after engagement with the last collection of resources has been completed and the second will take place two months later. This intended to help us better understand what from the process resonated with you. During the focus group interviews, you will have access to your journal and I will have a laptop with each of the collections opened on separate tabs. **These semi-structured, focus-groups interviews will be recorded with an audio recording device and be guided by the following questions:**

1. Which specific image/group of (re)photographs resonated the most with you and why?
2. How did engaging with (re)photographs prompt your thinking about the past? The present? Future?
3. What effect did space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you) have on the creation of your journal responses?
4. How did the (re)production of each collection influence how you think about the past? The present? Future?
5. What do you think the locations represented in the images will look like in the future? In 50 years? 75 years? 100 years? 150 years?
6. Is there anything from your journal that you would like to share?

With regards to the audio recording, only members of the research team will have access to the recordings. All information recorded will be added to the information from other people taking part in the study so no one will know who you are. Pseudonyms, or fake names, will be used during the final report of findings.

The audio recordings and transcriptions will be maintained for five years. At that time (2024) and after the Final Report is submitted to the IRB, all recordings will be deleted and copies of the transcripts and journals will be shredded.

**What things might happen if you participate?**

To the best of our knowledge, your participation in this study will not harm you.

**Is there benefit to me for participating?**

We are unsure if you will receive any benefits by taking part in this research study. However, some people have experienced a deeper sense of understanding the connectivity of the past, present, and what is to become of the future, when working with and discussing historically themed re-photographs.

**What other choices do I have if I do not participate?**

- A separate assignment that involves responding to visual resources.
- You will be given a collection of historical photographs and be asked to describe ways in which they are similar and different.
• There will be no discussion about your responses, however, you will be able to submit your written/artistic responses to the visual resources for extra credit points (8 points total).

Do I have to take part in this study?

You should talk with your parents or guardian and others about taking part in this research study. If you do not want to take part in the study, that is your decision. You should take part in this study because you want to volunteer.

Will I receive any compensation for taking part in this study?

You will have the opportunity to earn extra-credit towards your grade (8 total points).

Who will see the information about me?

Your information will be added to the information from other people taking part in the study so no one will know who you are.

The researchers will do everything they can to make sure what you say in the semi-structured focus group is kept confidential. However, we cannot promise that other participants in the semi-structured focus groups will keep what you say to themselves. The researchers would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the semi-structured focus group to others.

Can I change my mind and quit?

If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to stop participating. This will also have no adverse impact of your academic standing in class. Also, the people who are running this study may need for you to stop. If this happens, they will tell you when to stop and why.

What if I have questions?

You can ask questions about this study at any time. You can talk with your parents, guardian or other adults about this study. You can talk with the person who is asking you to volunteer by calling Bretton Varga at 408-507-7144. If you think of other questions later, you can ask them. If you have questions about your rights as a research participant you can also call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

Assent to Participate

I understand what the person conducting this study is asking me to do. I have thought about this and agree to take part in this study. I have been given a copy of this form.
Name of person agreeing to take part in the study

Signature of child agreeing to take part in the study: ______________________________

Printed name & Signature of person providing Information (assent) to subject

Date

Date

Date
Appendix B: Parental Permission Form

Parental Permission for a Child to Participate in Research
Information for parents to consider before allowing your child to take part in this research study.

Title: Historical Connectivity: Exploring Students' Perceptions of Temporality
Pro # 000030

Overview: We are asking you to allow your child to take part in a research study. The following information is being presented to help you and your child decide whether or not your child should participate in a research study. The sections in this Overview provide the basic information about the study. More detailed information is provided in the remainder of the document. When we use the term “you” in this document, we are referring to your child.

Study Staff: This study is being led by Bretton Varga who is a doctoral candidate and the University of South Florida and a teacher at/in Sarasota County School District. This person is called the Principal Investigator. He is being guided in this research by Dr. Michael Berson. Other approved research staff may act on behalf of the Principal Investigator.

Study Details: This study is being conducted at and has been approved by the Sarasota County School Board and principal of . The purpose of the study is to learn how students think about the relationship between the past, present and what is to become of the future within a historical context. We are also interested in learning the role that space (surroundings), time (devices, time constraints), and matter (surrounding objects) play during secondary students’ engagement with (re)photographs. His research will occur in Bretton Varga’s classroom during.

You will be asked to participate in approximately six visits that will take about 45 minutes each. The first five visits will occur in consecutive weeks and then you will be asked to participate in a visit two months later. Along with this, you will be asked to make three journal entries per collection (12 total) on your own time in a journal that will be provided. As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to
print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. You may wish to use these photographs during the focus group interviews to help further the conversations.

The journals will be collected at the end of each week following your engagement with each collection of resources. There will be two extra-credit points given for each journal submission (8 total). At the end of the four weeks, you will be asked to participate in two semi-structured focus group interviews. A focus group is a small group of 6-8 participants and it is called semi-structured due to short list of questions that have been prepared. This allows us to explore a range of topics that may come up during our conversation. During the focus group interviews, you will have access to your journal. The first of the semi-structured focus group interviews will occur after engagement with the last collection of resources has been completed and the second will take place two months later. This intended to help us better understand what from the process resonated with you. The total amount of time you will be expected to give to volunteer for this study is approximately six hours.

Participants: You are being asked to take part in this research study because you are enrolled in Bretton Varga’s Global Perspectives course and have already demonstrated an ability to think creatively and abstractly. If you take part in this study, you will be one of about 25-30 people at this site.

Voluntary Participation: Your participation is voluntary. You do not have to participate and may stop your participation at any time. There will be no penalties or loss of benefits or opportunities if you do not participate or decide to stop once you start. Alternatives to participating in the study include:
- A separate assignment that involves responding to visual resources.
- You will be given a collection of historical photographs and be asked to describe ways in which they are similar and different.
- There will be no discussion about your responses, however, you will be able to submit your written/artistic responses to the visual resources for extra credit points (8 points total).

Your decision to participate or not to participate will not affect your student status, course grade, recommendations, or access to future courses or training opportunities.

Benefits, Compensation, and Risk: We do not know if you will receive any benefit from participation. However, you may earn 2 extra-credit points per journal that is submitted. There is no cost to participate. You will not be compensated for your participation. This research is considered minimal risk. Minimal risk means that study risks are the same as the risks you face in daily life.

Confidentiality: Even if we publish the findings from this study, we will keep your study information private and confidential. Anyone with the authority to look at your records must keep them confidential.
Why are you being asked to take part?
You are being asked to take part in a research study about the use of (re)photographs to interrogate how temporal (relating to time) and historical elements are connected. By doing this study, we hope to learn how students make connections to, with, and about the past, present and future. We are also interested in learning the role that space (surroundings), time (devices, time constraints), and matter (surrounding objects) play during secondary students’ engagement with (re)photographs.

If you take part in this study, you will be one of about 25-30 people at this site.

Furthermore, you are being asked to take part in this research study because you are enrolled in Bretton Varga’s Global Perspectives course and have already demonstrated an ability to think creatively and abstractly.

Study Procedures:
This study involves engaging with time-related resources. If you take part in this study, you will be asked to:

- Engage with (re)photographs that compare and contrast two historical locations at two different points in time.
- After introducing the collection of (re)photographs, you will have about 30 minutes to begin exploring them, looking at ways in which all elements in the image are connected (past-present-future).
- The remainder of class time will be allocated towards having you respond both textually and/or artistically to the following prompt: **How are all elements depicted in the (re)photographs connected?** Each of the four engagement sessions will include the same prompt. All responses will be made in a journal that is provided.
- You will be asked to take the journal home and make at least more three entries per collection. The total number of expected journal entries for the entire study is 16 (1 in-class and three outside of class entries per week). As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. You may wish to use these photographs during the focus group interviews to help further the conversations. The journals will be turned in each Friday and redistributed the following Monday, using a numbering scheme to help you locate your journal. The journals will be photocopied and returned to you for keeping at the end of the school calendar (May 20, 2020).
- In summary, each session of the four engagement sessions will consist of: (1) 3-5 minutes for introduction, (2) approximately 30 minutes for (re)photograph engagement, and (3) approximately 10 minutes for textual/artistic/photographic responses.
- Following the engagement with each collection, there will be two rounds of semi-structured focus group interviews. These will occur the week after the last engagement and be spaced two months apart. During the focus group interviews, you will have access to your journal and I will have a laptop with each of the collections opened on separate tabs. **These semi-structured interviews will be recorded with an audio recording device and be guided by the following questions:**
1. Which specific image/group of (re)photographs resonated the most with you and why?
2. How did engaging with (re)photographs prompt your thinking about the past? The present? Future?
3. What effect did space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you) have on the creation of your journal responses?
4. How did the (re)production of each collection influence how you think about the past? The present? Future?
5. What do you think the locations represented in the images will look like in the future? In 50 years? 75 years? 100 years? 150 years?
6. Is there anything from your journal that you would like to share?

With regards to the audio recording, only members of the research team will have access to the recordings. All information recorded will be added to the information from other people taking part in the study so no one will know who you are. Pseudonyms, or fake names, will be used during the final report of findings.

The audio recordings and transcriptions will be maintained for 5 years. At that time (2024) and after the Final Report is submitted to the IRB, all recordings will be deleted and copies of the transcripts and journals will be shredded.

**Total Number of Participants**

About 20-30 individuals will take part in this study.

**Alternatives / Voluntary Participation / Withdrawal**

Alternatives to participating in the study include:
A) Engaging with historical images and creating responses
B) Each response may be submitted for two extra-credit points (2 points per weekly image, 8 points total)

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Any decision to participate or not to participate will not affect your student status or course grade.

**Benefits**

We are unsure if you will receive any benefits by taking part in this research study. However, some people have experienced a deeper sense of understanding the connectivity of the past, present, and what is to become of the future, when working with and discussing historically themed re-photographs.
Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Compensation

You will have the opportunity to earn extra-credit towards your grade (8 total points).

Costs

It will not cost you anything to participate in the study.

Conflict of Interest Statement

As best we know, there is no conflict of interest with this research.

Privacy and Confidentiality

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. These individuals include:

- The research team, including the Principal Investigator, study coordinator, and all other research staff.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.
- Any agency of the federal, state, or local government that regulates this research. This includes Florida Department of Education, the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, and staff in USF Research Integrity and Compliance.

Please be advised that although the researchers will take every precaution to maintain confidentiality of the data, the nature of semi-structured focus groups prevents the researchers from guaranteeing confidentiality. The researchers would like to remind you to respect the privacy of your fellow participants and not repeat what is said in the semi-structured focus group to others.
You can get the answers to your questions, concerns, or complaints.

If you have any questions, concerns or complaints about this study, call Bretton Varga at 408-507-7144. If you have questions about your rights, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

Consent for My Child to Participate in this Research Study

I freely give my permission to let my child take part in this study. I understand that by signing this form I am agreeing to let my child take part in research. I have received a signed copy of this form to take with me.

Signature of Parent of Child Taking Part in Study

Date

Printed Name of Parent of Child Taking Part in Study

Printed Name of the Child Taking Part in Study

Statement of Person Obtaining Informed Consent and Research Authorization

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research participant speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research participant has provided legally effective informed consent.

Signature of Person Obtaining Informed Consent

Date

Printed Name of Person Obtaining Informed Consent
Appendix C: Recruitment Flyer

Seeking High School Students Enrolled in Mr. Varga’s Global Perspectives Course

For Research Study

I am seeking students enrolled in my Global Perspectives course.

PURPOSE:
The purpose of this study is to use visual resources as a means of exploring secondary students’ conceptualizations of time and historical connectivity. This study that focuses on exploring what is produced when students are exposed to time-themed (re)photographs.

LENGTH OF STUDY:
The study will be a total of 6 weeks long over the course of 2 months. Participants will engage with (re)photographs, be asked to make a total of 16 responses in a journal that will be provided, and participant in 2 rounds of semi-structured focus group interviews. While the engagement with the visual resources will consist of only 4 class periods (during school hours), each participant will have online access to each collection and be asked to complete an additional 3 entries each week to respond in their journal.

At the end of the 4 weeks, you will be asked to participate in 2 semi-structured focus group interviews. The first of the semi-structured focus group interviews will occur after engagement with the last collection of resources has been completed and the second will take place 2 months later. This intended to help us better understand what resonated with you throughout the study. The total amount of time you will be expected to give to volunteer for this study is approximately 6 hours.

COMPENSATION:
You will receive 2 extra credit points towards your grade for each journal submission (8 possible points). If you choose not to participate in the study, you may submit each of the 4 alternative assignments for 2 points as well (8 possible points).

LOCATION:
The study will take place in Mr. Varga’s classroom during school hours. This study has been approved by Research Department of Sarasota County Schools.

CONTACT:
Please email Bretton Varga at brettonvarga@gmail.com if you are interested in participating.
Appendix D: Semi-Structured Interview Protocol

(All interviews will be semi-structured and will have few set questions, as I am more interested in seeing where the participant goes with the information she or he is sharing.)

Welcome, and thank you for your time. We’re here because you are enrolled in my Global Perspectives course and have agreed to participate in the study titled: Historical Connectivity: Exploring Students' Perceptions of Temporality. This interview should take approximately 45 minutes, and you are welcome to stop participating anytime throughout the interview. Just let me know what works for you!

The interview questions are relatively short because I am more interested in learning about your thoughts, beliefs, and actions. This process is intended to emphasize respectfulness, openness, creativity, and experimentation rather than saying the “right” answer. We are all here to learn from each other. Please don’t hesitate to share anything with me that you think is pertinent to the study.

1. Which specific image/group of (re)photographs resonated the most with you and why?
2. How did engaging with (re)photographs prompt your thinking about the past? Present? Future?
3. What effect did space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you) have on your (re)actions to the resources (engagement, journal entries, and thinking)?
4. How did each collection’s pairing of two different past points in time influence how you think about the future?
5. What do you think the locations represented in the images will look like in the future? In 50 years? 75 years? 100 years? 150 years?
6. Is there anything from your journal that you would like to share?
Appendix E: Introduction to Boston Then and Now

Today we will be working with (re)photographs. These are two images of the same subject taken at two points in time and combined to make a new image. Today, we will be looking at a collection of (re)photographs that compares historic visual representations of neighborhoods and landmarks around Boston with modern-day images. This collection was created to help people consider ways that buildings, nature, and people around Boston have changed since the early 1900’s. There is a tool within each image that allows you to toggle between the two time-periods. This is called a slider and is used in a process called digital cross-fading.

There are 18 resources in this collection. As you engage with the images, pay close attention to details great and small while considering how all elements have or haven’t changed. This includes how the images were produced. You have approximately 30 minutes to explore the digital collection of (re)photographs. After that, you will have 10 minutes draw or write down some ideas in the journal that has been provided. As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. Please do not take any photographs of other participants or of anything that could be used to identify you. You may wish to use these photographs during the focus group interviews to help further the conversations.

As a reminder, once this session ends, please take your journal with you and complete at least 3 entries throughout the remainder of the week, making note of the space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you). I will be collecting the journals each Friday and returning them to you the following Monday using the numbers on the back of journal. Please do not include any self-identifying information in your responses. To guide your responses, please consider this question:

“How are all elements depicted in the (re)photographs connected?”
Appendix F: Introduction to Cass Tech—Now and Then

Today we will be working with (re)photographs. These are two images of the same subject taken at two points in time and combined to make a new image. Today, we will be looking at images that highlight the troubling decline of schools in and around the Detroit area. These schools were quickly built in the 1920’s to meet the need of rapidly developing industrialization and population. Specifically, this collection uses (re)photography to show the different ways Cass Tech High School has changed over the years. Although there are 43 images in this collection, please focus the first 15 images. Once you are done engaging with them, feel free to explore others.

While engaging with the images, pay close attention to details great and small while considering how all elements have or haven’t changed. This includes how the images were produced. You have approximately 30 minutes to explore the digital collection of (re)photographs. After that, you will have 10 minutes draw or write down some ideas in the journal that has been provided. As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. Please do not take any photographs of other participants or of anything that could be used to identify you. You may wish to use these photographs during the focus group interviews to help further the conversations.

As a reminder, once this session ends, please take your journal with you and complete at least 3 entries throughout the remainder of the week, making note of the space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you). I will be collecting the journals each Friday and returning them to you the following Monday using the numbers on the back of journal. Please do not include any self-identifying information in your responses. To guide your responses, please consider this question:

“How are all elements depicted in the (re)photographs connected?”
Appendix G: Introduction to Ghosts of War

Today we will be working with (re)photographs. These are two images of the same subject taken at two points in time and combined to make a new image. Drawing inspiration from World War II film negatives found a flea-market, artist and (re)photographer Jo Teeuwisse created a series of images that integrate elements of the past with the present. Teeuwisse’s project is more than providing information and seeks to instigate a unique insight into how World War II is (still) connected to the present. Specifically, her project attempts to illuminate the role physical locations play in the process of engaging with and understanding history. She spent countless hours trying to make an exact locational match. As you will be able to see, Teeuwisse gave the subjects from WWII a special treatment.

There are 14 resources in this collection. While engaging with the images, pay close attention to details great and small while considering how all elements have or haven’t changed. This includes how the images were produced. You have approximately 30 minutes to explore the digital collection of (re)photographs. After that, you will have 10 minutes draw or write down some ideas in the journal that has been provided. As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. Please do not take any photographs of other participants or of anything that could be used to identify you. You may wish to use these photographs during the focus group interviews to help further the conversations.

As a reminder, once this session ends, please take your journal with you and complete at least 3 entries throughout the remainder of the week, making note of the space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you). I will be collecting the journals each Friday and returning them to you the following Monday using the numbers on the back of journal. Please do not include any self-identifying information in your responses. To guide your responses, please consider this question:

“How are all elements depicted in the (re)photographs connected?”
Appendix H: Introduction to American Civil War Then and Now

Today we will be working with (re)photographs. These are two images of the same subject taken at two points in time and combined to make a new image. In the fourth and final collection, we will be exploring an interactive collection of (re)photographs that are situated within the context of the American Civil War. In 2015, (re)photographer David Levene meshed glass negatives from the Civil War and the Related Prints collection from the Library of Congress with his own modern images he captured after revisiting the historic locations. He did this in part to mark the 150th anniversary of the ending of the Civil War. To the right of the image is a slider that will allow you to toggle between “then” and “now.” There is a sound clip that accompanies several of the images. While listening is not required, you may explore the sound clip if you are interested.

There are 12 images in this collection. While engaging with the images, pay close attention to details great and small while considering how all elements have or haven’t changed. This includes how the images were produced. You have approximately 30 minutes to explore the digital collection of (re)photographs. After that, you will have 10 minutes draw or write down some ideas in the journal that has been provided. As you are making your responses, you are encouraged to take pictures of objects (matter) around you. While no photography related equipment will be provided, you may wish to print out your pictures and add them to your journal. If you are unable to take any photographs, illustrating surrounding objects is also an option. Please do not take any photographs of other participants or of anything that could be used to identify you. You may wish to use these photographs during the focus group interviews to help further the conversations.

As a reminder, once this session ends, please take your journal with you and complete at least 3 entries throughout the remainder of the week, making note of the space (surroundings), time (duration of entry and time keeping devices), and matter (all other stuff around you). I will be collecting the journals each Friday and returning them to you the following Monday using the numbers on the back of journal. Please do not include any self-identifying information in your responses. To guide your responses, please consider this question:

“How are all elements depicted in the (re)photographs connected?”
Appendix I: Permissions and Images

Personal Correspondence via Email
Collection #1
Boston: Then and Now

To: Boston.com
From: Bretton Varga
September 18, 2018

Hello, my name is Bretton Varga and recently I came across your project Boston Then and Now. I am currently in the later stages of earning a Ph.D. in Social Studies Education and wish to frame my dissertation around the use of resources that present students with new ways of thinking about time. Would it be okay to use your images in a study? I am still working out the details but it would involve working with your images with high school students to study their perceptions of time and connectivity.

Thank you for your time.

From: Boston.com
To: Bretton Varga
September 25, 2018

That would be fine. Please make sure to cite Jen Ryan with any use.

Images:
Personal Correspondence via Email
Collection: #2
Cass-Technical High School: Now and Then

To: admin@detroiturbex.com
From: Bretton Varga
September 14, 2018

Hello, my name is Bretton Varga and recently I came across your Cass-Tech High project. I am currently in the later stages of earning a Ph.D. in Social Studies Education and wish to do my dissertation on temporal disjunctions or ghosts in history. Would it be okay to use your images in a study? I am still working out the details but it would involve working with your images with high school students to study their perceptions of time and connectivity.

To: admin@detroiturbex.com
From: Bretton Varga
January 15, 2019

Hello, I wanted to follow up with an email that I sent in September regarding the use of your images for my dissertation. Would it be okay to use your images in my dissertation? I greatly appreciate your time.

Bretton Varga

To: admin@detroiturbex.com
From: Bretton Varga
September 9, 2019

My name is Bretton Varga and I am a doctoral candidate from the University of South Florida. I am currently getting ready to begin dissertating around a project that uses (in part) your Then and Now project to engage with history students. As such, I am seeking permission to use your posted photos in my dissertation. I will not be benefitting in any monetary way from your work, only adding in the images into the final write up of my project.

Please let me know if you have any questions or concerns. I think this project is incredible and am looking forward to seeing what my high school students produce with interacting with the temporally (disjointed) images.

Thank you!
Bretton Varga

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5 Although I did not get a response from Detroiturbex.com, upon reviewing the Fair Use Act, I decided to include a small section of images from this collection in the write-up of this dissertation. This decision was informed by the completion of Appendix J.
To: Jo Hedig Teeuwisse
From: Bretton Varga
September 20, 2018
Hello, my name is Bretton Varga and recently I came across your Ghosts of War images. They are truly remarkable and I was captivated by the entire collection. I am currently in the later stages of earning a Ph.D. in Social Studies Education and wish to do my dissertation on temporal disjunctions or ghosts in history. Would it be okay to use your images in a study? I am still working out the details but it would involve working with your images with high school students to study their perceptions of time and connectivity.

Thank you for your time and again, beautiful work with the images!

From: Jo Hedig Teeuwisse
To: Bretton Varga
September 22, 2018
Hello, yes sure, no problem!

Images:

![Image](Figure.png)

Cherbourg, avenue de Paris, ancient Poste de Police, jardin Public.
Rue Dom Pedro, civilians and American soldiers tear down the sign indicating the headquarters of the Todt organization in Cherbourg.
A group of civilians and GI’s in front of the notary office of Trévières Street Octave Mirbeau. The entrance is decorated with French and allied flags.
People are waiting for the liberators. (May 1945)
Saint Marcouf (Manche)
Auschwitz I, January 27th 1945. Russian soldiers with prisoners of Block 19, the quarantine blockhouse in the medical section of the camp.
Captain WH Hooper, who commands the Company of the 314th IR of the 79th IUS D and some of his men surround a column of German prisoners. Column takes a southerly direction, it will join the POW camps located on the plateau of the Mountain Roule, near the farm of Fieffe.
Rue Armand Levéel à Cherbourg
Corner covered, 1943, Acireale, Sicily
American troops in the center of Cherbourg pass under a balcony with English, American and French flags.
France, 1944. Rue des Fossés Plissons à Domfront (Orne). German soldiers surrendering.
Allied vehicles drive past Palace Noordeinde, The Hague, (May 1945)
German soldiers walking back to Germany after their surrender, walk passed a man with a Dutch flag. The Hague, (May 1945)
Allied soldiers walking towards center of Eindhoven, September 18th 1944, Frankrijkstraat Eindhoven.
Personal Correspondence via Email
Collection #4
Civil War Then and Now

To: David Levene
From: Bretton Varga
November 2, 2018

Hello David,
My name is Bretton Varga and I am a doctoral student at the University of South Florida. Recently I came across your project, *American Civil War Then and Now* and became very inspired to study student perceptions of temporalities and demarcations of time. I am very interested in the technology you used to blend your photographs. Could you pass along where/how I might be able to do the something similar?

Also, while I have decided to pursue this line of inquiry for my dissertation I am not completely certain about creating my own collection of images. Would it be possible for me to use your collection of Civil War photos for my dissertation?

I am grateful for any direction or degree of permission you would feel comfortable with providing.

Thank you for your time,
Bretton Varga

From: Lenora Peralta on behalf of David Levene
To: Bretton Varga
November 19, 2018

Dear Bretton,

Apologies for my delayed reply, David has been travelling and I have been picking up bits and pieces in his absence.

In terms of technique, David is of course best to reply to you. In terms of the actual “tech” so to speak, we can’t supply you with the ‘sliders’ as such and I suggest you perhaps get in touch with the Guardian directly.

In terms of using David’s own images in your thesis, I’m sure we can work out an appropriate agreement. For academic, non-commercial work we tend to work to lowest fee of £50, depending on number of images to be used and additional context. If you could provide me with a little more detail we will do our best to work something out that would suit your needs.

Many thanks, Leonora

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6 Based on granted permissions, I have included only one screen-shot from this collection in this dissertation. Accordingly, I did not provide any copies of the screen-shot for students (See Figure 2).
To: Lenora Peralta on behalf of David Levene  
From: Bretton Varga  
December 11, 2018

Leonora,
Thank you for the response. I apologize for not getting back to you sooner. I am looking to be able to use some of David's images that were published on the guardian.com with a group of students and then possibly a screenshot of the combined two images in my dissertation. Here is an example of what I am thinking:

![Image of a river scene with two children standing in the water.](image)

Would you charge a fee for something like this? I would be happy to pay to use such an example. Thank you again for your time and for following up with me and I hope you have a wonderful day.

Best,
Bretton Varga

From: Nadia Sparham on behalf of David Levene  
To: Bretton Varga  
September 15, 2019

Hello Bretton,
You may use the image for your dissertation. For any further usage please contact us to arrange a license. Do you have what you need?

Thanks, and best wishes,
Nadia
Appendix J: Fair Use Worksheet

USF Fair Use Worksheet

The fair use exception was added to the Copyright Act of 1976 as section 107 and was based on a history of judicial decisions that recognized that unauthorized use of copyrighted materials were "fair uses." The distinction between fair use and infringement may be unclear and not easily defined. There is no specific number of words, lines, or notes that may safely be taken without permission. This worksheet is offered as a tool to help you determine if your use of copyrighted content is likely to be considered to be a "fair use."

Before you begin your fair use determination, ask yourself the following questions:

1. Is the work no longer protected by copyright?
   a. Is it in the public domain?
   b. Did I retain my copyright ownership over a work I created when signing my publication contract?
2. Is there a specific exception in copyright law that covers my use?
   a. Does my use fit within Section 108 of copyright law: "Reproduction by libraries and archives?"
   b. Does my use fit within Section 110 (1) of copyright law: "performance or display of works in face to face classrooms?"
   c. Does my use fit within Section 110 (2) of copyright law: "performance or display of works in online classrooms (also known as the TEACH Act)" see TEACH Act checklist
3. Is there a license that covers my use?
   a. Is the work issued under a Creative Commons license and can I comply with the license terms?
   b. Do I have access to the material through library licensed content? Ask your librarian

If your answer to the above questions was no, then you should proceed with your fair use evaluation. Section 107 also sets out four factors to be considered in determining whether or not a particular use is fair:

1. The purpose and character of the use, including whether such use is of commercial nature or is for nonprofit educational purposes
2. The nature of the copyrighted work
3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole
4. The effect of the use upon the potential market for, or value of, the copyrighted work

None of these factors are independently determinative of whether or not a use is likely to be considered fair use. In evaluating your use, you should evaluate the totality of the circumstances and consider all of the factors together. The Fair Use Worksheet will help you balance these factors to determine if your use of copyrighted material weighs in favor of 'fair use.' While valuable for your own documentation the Worksheet is not intended as legal advice, which can be provided only by USF General Counsel.

LeEtta Schmidt, inschenidt@usf.edu and Drew Smith, dsmith@usf.edu
Reviewed by USF General Counsel 08/11/2015
INSTRUCTIONS

Check all boxes that apply, and keep a copy of this form for your records. If you have questions, please contact the USF General Counsel or your USF Tampa Library Copyright Librarian.

Name: Bretton A. Varga Date: 4/22/2020

Class or Project: Dissertation

Title of Copyrighted Work: Cass Technical High School: Now and Then

PURPOSE AND CHARACTER OF THE USE

<table>
<thead>
<tr>
<th>Likely Supports Fair Use</th>
<th>Likely Does Not Support Fair Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Educational</td>
<td>☐ Commercial</td>
</tr>
<tr>
<td>☐ Teaching (including multiple copies for classroom use)</td>
<td>☐ Entertainment</td>
</tr>
<tr>
<td>☐ Research or Scholarship</td>
<td>☐ Bad-faith behavior</td>
</tr>
<tr>
<td>☐ Criticism, Parody, News Reporting or Comment</td>
<td>☐ Denying credit to original author</td>
</tr>
<tr>
<td>☐ Transformative Use (your new work relies on and adds new expression, meaning, or message to the original work)</td>
<td>☐ Non-transformative or exact copy</td>
</tr>
<tr>
<td>☐ Restricted Access (to students or other appropriate group)</td>
<td>☐ Made accessible on Web or to public</td>
</tr>
<tr>
<td>☐ Nonprofit</td>
<td>☐ Profit-generating use</td>
</tr>
</tbody>
</table>

Overall, the purpose and character of your use supports fair use or does not support fair use.

NATURE OF THE COPYRIGHTED MATERIAL

<table>
<thead>
<tr>
<th>Likely Supports Fair Use</th>
<th>Likely Does Not Support Fair Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Factual or nonfiction</td>
<td>☐ Creative or fiction</td>
</tr>
<tr>
<td>☐ Important to favored educational objectives</td>
<td>☐ Consumable (workbooks, tests)</td>
</tr>
<tr>
<td>☐ Published work</td>
<td>☐ Unpublished</td>
</tr>
</tbody>
</table>

Overall, the nature of the copyrighted material supports fair use or does not support fair use.

AMOUNT AND SUBSTANTIALLY OF MATERIAL USED IN RELATION TO WHOLE

<table>
<thead>
<tr>
<th>Likely Supports Fair Use</th>
<th>Likely Does Not Support Fair Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Small amount (using only the amount necessary to accomplish the purpose)</td>
<td>☐ Large portion or whole work</td>
</tr>
<tr>
<td>☐ Amount is important to favored socially beneficial objective (i.e. educational objectives)</td>
<td>☐ Portion used is qualitatively substantial (i.e. it is the ‘heart of the work’)</td>
</tr>
<tr>
<td>☐ Lower quality from original (ex. Lower resolution or bit rate photos, video, and audio)</td>
<td>☐ Similar or exact quality of original work</td>
</tr>
</tbody>
</table>

LeEtta Schmidt, lmschmidt@usf.edu and Drew Smith dsmith@usf.edu
Reviewed by USF General Counsel 08/11/2015
Overall, the amount and substantiality of material used in relation to the whole supports fair use or does not support fair use.

**EFFECT ON THE MARKET FOR ORIGINAL**

<table>
<thead>
<tr>
<th>Likely Supports Fair Use</th>
<th>Likely Does Not Support Fair Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ No significant effect on the market or potential market for the original</td>
<td>☐ Replaces sale of copyrighted work</td>
</tr>
<tr>
<td>☐ No similar product marketed by the copyright holder</td>
<td>☐ Significantly impairs market or potential market for the work</td>
</tr>
<tr>
<td>☐ You own a lawfully acquired copy of the material</td>
<td>☐ Numerous copies or repeated, long-term use</td>
</tr>
<tr>
<td>☐ The copyright holder is unidentifiable</td>
<td>☐ Made accessible on Web or to public</td>
</tr>
<tr>
<td>☐ Lack of licensing mechanism for the material</td>
<td>☐ Affordable and reasonably available permissions or licensing</td>
</tr>
</tbody>
</table>

Overall, the effect on the market for the original supports fair use or does not support fair use.

**CONCLUSION**

The combined purpose and character of the use, nature of the copyrighted material, amount and substantiality of material used in relation to the whole and the effect on the market for the original supports fair use or does not support fair use.

*Note: Should your use of copyrighted material not support fair use, you may still be able to locate and request permissions from the copyright holder. For help on this, please feel free to contact your Copyright Librarian.*

---

This worksheet has been adapted from:

*Cornell University's Checklist for Conducting A Fair use Analysis Before Using Copyrighted Materials:*
[https://scholarship.cornell.edu/colloquium/docs/Fair Use Checklist.pdf](https://scholarship.cornell.edu/colloquium/docs/Fair Use Checklist.pdf)


*Smith, Kevin; Macklin, Lisa A.; Gilliland, Anne. A Framework for Analyzing any Copyright Problem. Retrieved from: [https://dlib.gsu.edu/ufccl/Reading%20Docs/A%20Framework%20for%20Analyzing%20Any%20Copyright%20Problem.pdf](https://dlib.gsu.edu/ufccl/Reading%20Docs/A%20Framework%20for%20Analyzing%20Any%20Copyright%20Problem.pdf)*

LeEtta Schmidt, [lmschmidt@usf.edu](mailto:lmschmidt@usf.edu) and Drew Smith [dsmith@usf.edu](mailto:dsmith@usf.edu)  
Reviewed by USF General Counsel 08/11/2015
Appendix K: Protecting Human Research Participants Certificate

CERTIFICATE
OF COMPLETION

PHRP Online Training, LLC certifies that

Bretton Varqa

has successfully completed the web-based course
"Protecting Human Research Participants Online Training."

Date Completed: 10/02/2019
Certification Number: 2841679
December 10, 2019  
Bretton Varga  
8811 17th Ave Cir NW Bradenton, FL  
34209

Dear Mr. Varga:

On 12/10/2019, the IRB reviewed and approved the following protocol:

<table>
<thead>
<tr>
<th>Application Type</th>
<th>Initial Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB ID</td>
<td>STUDY000030</td>
</tr>
<tr>
<td>Review Type</td>
<td>Expedited 6 and 7</td>
</tr>
<tr>
<td>Title</td>
<td>Historical Connectivity: Exploring Students' Perceptions of Temporality</td>
</tr>
<tr>
<td>Funding</td>
<td>None</td>
</tr>
<tr>
<td>IND, IDE, or HDE</td>
<td>None</td>
</tr>
</tbody>
</table>

Approved Protocol and Consent(s)/Assent(s):
- Protocol, Version #1, 11.10.19
  - Parental Permission, Version #1, 11.10.19
  - Child Written Assent, Version #1, 11.10.19

Attached are stamped approved consent documents. Use copies of these documents to document consent.

Research Involving Children as Subjects: 45 CFR 46.404
This research involving children as participants was approved under 45 CFR 46.404: Research not involving greater than minimal risk to children is presented.

Requirements for Assent and/or Permission by Parents or Guardians: 45 CFR 46.408 Permission of one parent is sufficient.
Assent is required of all children.

Institutional Review Boards / Research Integrity & Compliance

Within 30 days of the anniversary date of study approval, confirm your research is ongoing by clicking Confirm Ongoing Research in BullsIRB, or if your research is complete, submit a study closure request in BullsIRB by clicking Create Modification/CR.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

Various Menzel
IRB Research Compliance Administrator
Appendix M: District Approval Letter

Research, Assessment & Evaluation
1960 Landings Blvd., Sarasota, FL 34231
941-927-9000, Ext. 32257
Fax 941-927-4021
SarasotaCountySchools.net

Research Request Committee

Hello Bretton,

The Research Request Committee has reviewed your request and hereby, approves your request.

Good luck with your study.

Bonnie Wiechmann

On behalf of
Dr. Denise Cantalupo
Executive Director of Accountability and Choice

DC/bw