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GROWING UP RURAL: A SENSORY ETHNOGRAPHY OF RURAL CHILDREN'S PERSPECTIVES ON TIME, SPACE, AND PLACE

by

Rebecca Tilhou

B.A., May 2003, Old Dominion University

M.A. Ed., 2004, College of William and Mary

A Dissertation Proposal Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

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May 2021

Approved by:

Kristine Sunday (Director)

Angela Eckhoff (Member)

Laura Smithers (Member)

ABSTRACT

GROWING UP RURAL: A SENSORY ETHNOGRAPHY RURAL CHILDREN'S PERSPECTIVES ON TIME, SPACE, AND PLACE

Rebecca Tilhou Old Dominion University, 2021 Chair: Kristine Sunday

Rural places afford significant differences in learning opportunity than their urban and suburban counterparts, and are often viewed from deficit perspectives, with a focus on the challenges that are specific to rurality. This locally-focused, qualitative research explored how childhood learning and education in a rural, Mid-Atlantic peninsula of the United States are produced by the interactions between and influences of the place's geography, history, and culture. Through ethnographic and sensory fieldwork and participatory research with children at a place based learning program for youth housed at a public library, I present a deep examination of both formal and informal learning structures and systems in a geographically isolated, coastal place. Findings from this study were produced through two modes of analysis, one being traditional and systematic and the other taking on a fluid and theoretical post-qualitative approach. The ethnographic and sensory fieldwork data were analyzed through Massey's (2005) and Greene's (2004, 2020) theories of space, time and place, and Barad's (2007) new materialism, which focuses on the agentic qualities of matter and the concept of diffraction. Rich historical and present-day narratives from the rural place under investigation were interwoven with theory and diffractive readings to present the inherent influence of space, time and matter humans' learning and meaning-making. I then employed thematic content analysis to analyze artifacts from the children's place based learning program at the library, which included a co-taught photography lesson, children's digital images taken with personal cameras, and selected captions made through Photovoice. Finally, I situated themes that emerged from the content analysis alongside

further diffractive readings of the children's data to both support and challenge the analysis methods used. This study presents how growing up rural, with specific attention to the geography, history, and culture of a rural place, shapes and produces children's learning. Furthermore, rural youth's perspectives were found to be intrinsically unique to their coastal place, and these perspectives simultaneously inform strength-based discourses about growing up rural and the development of deeply engaging place based curricula and pedagogy that attend to the inherent impact and influence of place. Copyright, 2021, by Rebecca Tilhou, All Rights Reserved.

This dissertation is dedicated to my own childhood place. Where I was raised, childhood existed in a place of natural beauty—forests and marshes, rivers and swamps, salty bodies of water where the sun rose and set each day. This place was animate, alive, and shaped the person I am. My parents, Michael and Mary Catherine, chose this place and taught me the importance of caring for and loving it. Because I grew up in this place, I met Andrew, in childhood, and today we simultaneously remain children together and grow old alongside each other as we raise our own daughters, Sophie and Claire. This is a place of my past, present, and future. I dedicate this research to all of you, and, also, Minx, the black and white cat who rested by my side during the hours upon hours of writing.

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CHAPTER 1

INTRODUCTION

Space can never be that completed simultaneity in which all interconnections have been established, in which everywhere is already linked with everywhere else. A space, then, which is neither a container for always-already constituted identities nor a completed closure of holism. This is a space of loose ends and missing links. *For* the future to be open, space must be open too.

-Doreen Massey, *For Space* (Massey, 2005, p. 12, original emphasis)

Stand on the shore at the coastal tip of Virginia, facing north at sunset, and one will see a line of lights twinkle on like stars, cutting a horizon through the darkening sky, separating water and air. The illuminated path across the Bay takes travelers to a peninsula surrounded by islands and marshes, spaces and history. The toll to cross the 17-mile bridge is \$14 one way. The bridge meets a single Route, not quite an interstate, which cuts a long peninsula into two sides: Bayside and Seaside. Old country roads connect to the Route like the tributaries of salty bodies that surround, provoking the driver to turn a head, wondering; tempting the driver to turn down one of those old dirt roads which all inevitably lead to sea. Since-past farmhouses and sharecroppers' quarters, old English colonial architecture, dilapidated shacks, acres of farmland that meet huge bluffs or barrier islands, watermen and their boats, and million dollar contemporary homes too speckle the way—east and west, north and south. Childhood here must be marked by barefoot prints in marshes and sand and farmland, and everything that barefoot could possibly mean to childhood—from wildness and play to freedom of space, to not having shoes that fit.

Rural places are countless across America. They are characterized by open countryside and undeveloped land, often having an agrarian or industrial economy with small populations and towns of 2,500 people or less (Neumann, 2018; Tieken & San Antonio, 2016; United States Census Bureau, 2019b). There are vast amounts of rural lands across the United States, however not all are populated, and, historically, most rural populations cluster on the outskirts of urban areas. The reason for this is rural populations often reside on farms which produce food and goods that can be sold at nearby urban centers or in small markets that act as a middle ground between rural residents and nearby cities. Today, continued dependence on farming, topography, and climate are all reasons for sparse settlements in rural places (United States Census Bureau, 2019b).

Though the term *rural* includes these defining characteristics, every rural place is unique, shaped by particular geographies and climates, existing resources, and economies possible and built there. Settlement and colonization have written histories across rural America and contribute to present-day diverse and ever-transforming cultures and peoples (Tieken & San Antonio, 2016). In an era of globalization, communities of rural America face change alongside their urban counterparts, though change may not translate in the same way. Importantly, youth in rural places, just as in cities and suburbs across America, are equally responsible for the future of America's rural places and new generations (Tieken & San Antonio, 2016).

When considering how rural communities can foster a positive future for their youth, discourses and research that illuminate the unique, diverse, and experiential affordances of living and being raised in a rural place can have great influence, in particular, on education and curriculum. Those affordances—the unique geography, resources, culture, history, and small, connected communities—all contribute to environment ripe with living and learning experiences specific to place. Experiences within a place are what shape who children are, how they perceive the world, and how they may aspire and go forth into their future (Tieken & San Antonio, 2016). However, this strength-based perspective is challenged by the fact that high poverty rates can also be a common characteristic of rural places. In turn, views from federal and state governments, research and policy institutes, and even advocacy organizations often perceive rural places, communities, families, and youth from a deficit perspective (Corbett, 2016; Hebert & Beardsley, 2001; Tieken, 2016). Rural places can be perceived as not having not kept up with the modern world and/or have failing economies (Corbett, 2007; Corbett, 2016; Kannapel & DeYoung, 1999; Mette et al., 2019; Tieken, 2016). Rural communities may be in need of economic, health, and educational assistance (Edmondson, 2003; Theobald, 1997; Tieken, 2014). Educational systems are not necessarily comparable to wealthy suburban schools or urban counterparts (Mette et al., 2019; Sutton & Pearson, 2002; Tieken, 2014, 2016). And, rural children may experience low mobility (Chetty et al., 2014). These examples of issues and challenges related to rural places are real, however, they ought not define perspectives of rural children and overshadow the positive affordances of place which include the possible freedoms and experiential learning opportunities children may have specific to the geography of their living and learning situations.

Indeed, a place deeply influences the way children grow and learn, and how they are intrinsically shaped. Both formal and informal learning structures and spaces are implicitly influenced by the rural place, and while the challenges and issues that are specific to *rural* do influence education and learning, rural education and learning is also produced in positive ways by the place itself. Dewey (1900, 1915, 1943) noted that education reflects greater society, thus children's learning is a mirror of place. If the community is connected and supportive, then

learning spaces manifest as connected and supportive. Furthermore, lived environments send out influential messages that shape children's desires, aspirations, and knowledge construction (Biesta, 2017). These environments are not only societal and cultural; they are also natural, physical, spacious. Additionally, the school as a form of education may serve as a hub for community, though it is not the only space for learning. Informal, experiential learning opportunities and experiences also immensely influence children (Dewey, 1938).

The purpose of this research is to explore how the particulars of place, specifically the geography, history, and culture of a rural place, are interacting to produce both formal and informal learning environments and experiences. This exploration will be done through ethnographic and place based education practices with children. Contributions from youth in this study can help to inform future curriculum designed with the rural child in mind. Rural youth, and people, have perspectives unique to their place, specific to the physical geography, the history, and the culture of place, and these perspectives can inform future curriculum designs and pedagogy.

In particular, future designs that include more place based education can support localized, experiential learning. Empirical research is abundant in describing and documenting the utility of place based education at every level of human learning, as it embodies a pervasive attention toward human relationships with local and surrounding places. (Greenwood, 2009. Gruenewald, 2003; Gruenewald, 2008; Smith, 2002; Smith & Williams, 1999; Sobel, 2004). Moreover, the content of place based education is inherently "specific to the geography, sociology, politics, and other dynamics" of a particular place (Woodhouse & Knapp, 2000, p. 4). Sobel (1996, 2004) and Gruenewald (2003a; 2003b), two leading place based education scholars, provide a framework for practice and research that illustrates values of love of nature and local community, stewardship and civic engagement. Further, their work provides practical applications for experiential learning. Sobel's guiding philosophy places focus on nurturing an empathetic experience in children that leads to a love of nature, noting, "if we want children to flourish, to become truly empowered, then let us allow them to love the earth before we ask them to save it" (Sobel, 1996; p. 39). Gruenewald approaches place based education by addressing dual objectives of decolonization and the encouragement of teachers and students to reinhabit their places so as to pursue action that improves the social and ecological life of environments and the future. These scholars' place based education philosophies simultaneously illuminate the "experience of being human in connection with the others and with the world of nature, and the responsibility to conserve and restore our shared environments for future generations" (Gruenewald, 2003a, p. 6). While these scholars provide a strong philosophical framework for practice, the body of place based education research across scholars often does not address deeper theoretical contexts that may be foundational to why place based learning it is an effective and even critical mode for learning.

Rural Place Issues, Challenges, and the Influential Role of Education

The role of education can be deeply influential when considering and addressing the issues and challenges specific to the rural place. However, this is no easy task. Statistics and research about rural places and people show that rural rates of poverty are consistently higher than urban places. Nationwide, 23.5 percent of children residing in rural areas are impoverished compared to 18.8 percent in urban places (Neumann, 2018). Nearly half (6.1 million) of America's children living in poverty are in the Southeast, which is the region with by far the highest rate of poverty in the United States (Neumann, 2018).

Poverty status is determined by comparing a family's total before-tax income to a poverty threshold. The threshold varies based on the number of adults and children within the family, however, thresholds are not adjusted for cost of living differences across localities (Schaefer et al., 2016). The current threshold measure for a family of four (two parents and two children), for example, is \$25, 465 (United States Census Bureau, 2019a), and if a family of four's income is less than this threshold, then every individual in the family, including children, are considered to be in poverty (Benson & Bishaw, 2019; Schaefer et al., 2016). Child poverty rates are lower for white non-Hispanic than minority populations regardless of the racial-ethnic composition characteristic of the county in which they live. More than three-quarters of counties with persistent rates of child poverty have a significant child minority population (Schafer et al., 2016). Rural poverty can be attributed to poor access to employment opportunities, low educational attainment, and other factors such as generational poverty and pervasive racial inequalities (Neumann, 2018; Schaefer et al., 2016; USDAERS, 2018). Still, then, what is poverty? Is it a statistic, a number? A condition? Is it material, experiential? Is it marked by time? Does it predict the future?

The futures and mobility of youth are indeed a common topic of rural places. Mobility is a loaded term and can refer to transportation, physical ability to move and reside in new places, increasing one's income, and immigration. These aspects of mobility inform and influence each other. There are differences in mobility across America (Chetty et al., 2014). A child who is poor in a community that is relatively well-off and has good schools and infrastructure may have more pathways to opportunity than a child living in a place where high poverty rates are persistent over generations and investments in education and infrastructure are negligible (Duncan, 1999; Schaefer et al., 2016). Particularly for rural areas, communities are characterized by low populations, broad spatial distribution of people, and physical isolation, which all make delivery of quality services and access to innovative programs more challenging than in urban or suburban areas (Duncan, 1999; Schaefer et al., 2016). However, living rural and low income does not necessarily mean a child has less of a chance for mobility than his or her urban counterparts. In fact, in many cases a child has a better chance of mobility if poor in a rural place rather than urban. A groundbreaking study by Chetty et al. (2014) found that poor children from rural counties across America have gained higher incomes than the national average by the age of 26. This is a result of neighborhood effects (Chetty et al., 2014). Rural places and communities, compared to poor urban communities, more often have a combination of factors, or neighborhood effects, that help poor children succeed in a labor market. Specifically, rural places with less racially segregated communities, little disparities in income, strong social networks, family stability, and good schools can result in adults that have higher income than people who grow up in places that lack those qualities (Chetty et al., 2014).

Additionally, education and learning are key topics surrounding rural youth. This research aims to explore how both formal and informal learning environments and experiences are shaped by the rural place. Yet, the difference between the two terms can be murky. In an analysis by Malcolm et al. (2003), the authors found that attributes of formal and informal learning are ever-present in all learning situations and interrelated. However, there are four aspects of formality/informality that can be used as a heuristic device for determining learning as more formal or informal (Malcolm et al., 2003). Those are: 1) *learning process* where the learning may be structured and guided by a teacher or incidental and everyday experiences; 2) *learning and setting* which would include a formal school building or workplace versus being in the community or with family or friends; 3) the *purpose* of the learning can be a learning

objective itself (formal) or the learning can manifest as secondary to another activity (informal); and 4) *content* which signifies what is being learned, whether it is established expert, vertical knowledge or every day practice, exploration, and competence. While these characteristics of formal/informal learning can be used as guiding definitions, it is just as important to recognize that in every learning situation formal and informal learning are never entirely separate and pieces of both fluidly integrate to make every learning experience unique (Malcolm et al. (2003). Critically, every learning situation can contain power differentials, and whether learning is termed informal or formal, it has the ability to be oppressive or emancipatory, often simultaneously. Issues of learner equality are critical in all contexts. The extent to which learners are emancipated or oppressed is certainly influenced by learning practices and pedagogies involved; however, the greater social, cultural, political, and organizational contexts of the place has just as much or more influence on the emancipatory potential of learning (Malcolm et al., 2003). In rural places that encounter the challenges of high poverty rates and varying opportunities for mobility, bringing to light the emancipatory power of educational structures is an important conversation to have. What these definitions do not include are those moments when children are outdoors, with peers or alone, with the world itself, and all the things of the world, which, too, are teachers. Does the sudden gust of wind coming off a body of water not teach the child about change and temperature and force? Would this be determined as formal or informal, or yes, aspects of both?

The formal and informal spaces of learning and education, namely, schools, can provide children with opportunities to leave their communities, and they can also promote pathways for youth to enliven and enrich the rural places where they live. Formal education systems can be a driving and unifying force in rural community development (Irvin et al., 2016; Schafft & Harmon, 2010), and providing innovative, authentic, and rich learning experiences for rural youth can improve economic, health, and social conditions for poor, affluent, and diverse populations alike as well as improve the communities in which they live (Gallay et al., 2016; Tieken & San Antonio, 2016; Zuckerman, 2019). Namely, place based education practices can provide the emancipatory, experiential learning argued for here.

In contrast, formal education structures can also be a source of friction and a place for resistance for rural youth, particularly when children's parents never finished high school or never went to college (Hendrickson, 2012; Tieken, 2016). White rural youth have described the influence their families have on their aspirations with discouragement of moving away and expectations of vocational career paths that only require a year or so of technical training (Hendrickson, 2012). Thus, aspirations may not always be characterized by greater formal educational attainment and income, and mobility may not be outwardly evident.

Tieken (2016) found that rural youth often feel that their formal education and academic environment did not relate to their lives beyond a classroom, which led to resistance towards attempting success in formal schooling. Youth in Hendrickson's (2012) and Tieken's (2016) research were making the conscious choice to stay in their childhood place and fit in with the familial cultures rather than strive for significant upward physical and economic mobility. Rural youth and their families do aspire for the future. However, success can be determined in many different ways. The friction of dichotomous cultural influences—formal education systems and structures alongside family traditions, informal learning experiences, and generational patterns create a complex entanglement in a place.

Rich learning experiences are never solely found in formal education (Dewey, 1938), but they always exist in the every-day experiences children have within every environment they occupy. Formal education can offer strategically designed curriculum, which is important; however, informal learning, where children can experience, enforce or reject and "rewrite," underscores how socio-spatial relations in a variety of spaces shape and produce youth's experiences and perceptions of the world and themselves (Holloway, Hubbard, Jöns, & Pimlott-Wilson, 2010). Place and learning transcend structure and institution, even family and culture, and move into the wider space, time, and physical nature of place. The field of education needs more research delving into other influences of meaning and knowledge production, beyond economic, social-cultural, and/or adult perspectives. Uncovering youth's perspectives about growing up rural can provide insights that can inform both formal and informal curricular and instructional practices with children of the future. As Dewey (1900, 1915, 1943) noted, education is a chance to "affiliate with life, to become the child's habitat, where he learns through directed living" (p. 18). A place of learning, as such, can become a "miniature community, an embryonic society" (p. 18). A child's place of learning may first be small, embryonic; though as the child grows with experience so does perspective, and it need not be through "directed living"-often the greatest learning is not extrinsically directed at all, and is, in essence, quite autotelic (Rautio, 2013).

Youth Perspectives about Learning Environments and Place

There is a tremendous body of literature and research from the fields of childhood studies, children's geographies, and education that provide robust insight into children histories perspectives, ideas, and lives. Coming from these fields are a broad range of topics; particularly relevant to this research are studies that tell and show children's stories and perspectives about place. For example, Punch (1998, 2001a, 2001b, 2002) worked with children in rural Bolivia, in their schools and community spaces, aiming to understand how they negotiated their independence as they grew up in a rural place. Questions she aimed to answer included what places were important to the children in their community, future aspirations, mobility outside the community, and their perceptions of their formal learning environments. The stories children told about their daily routines and learning experiences painted a rich picture of the affordances of living rural. In contrast to rural, Young and Barrett (2001) conducted research with urban street children of Kampala, Uganda. Through mapping, drawing, and photo diaries, children were able to map important places, draw what they did to survive in their place, and photograph typical scenes of their everyday lives. The influence of the streets was integral to youth's learning, as the streets were the youth's only "school." Dodman (2003) used photography with high school youth in Kingston, Jamaica to elicit their impressions and interpretations of their urban environments. Photographs taken and descriptive captions included scenic shots of the Caribbean Sea, gardens, homes, shorelines of litter, and streets of the city—showing the way youth capture the importance of environment and how they make meaning and learn from it. These are but a few examples—with only one being of *rural* youth—that explore children's perceptions of place and experience that influence knowledge construction and meaning making.

However, one is hard-pressed to find research that *thinks with* the influences, affordances, and challenges of learning environments, specifically rural, from children's perspectives. This means, rather than researching about aspects of place from an objective standpoint, the research seeks to illuminate the learning phenomenon from within and through the place itself, and the researcher is entangled within the place and participants too. Additionally, research explicitly focused on how the entanglement of the social and the natural, physical geography of place produces and shapes children's learning and meaning-making experiences is limited. Historical context and culture are influences that are considered in research in education, childhood studies

and geographies, and in general, the social sciences (Bentz & Shapiro, 1998; Blundell, 2016; Cresswell & Poth, 2018; Heath, 1983; Holloway & Valentine, 2000; James, Jenks, & Prout, 1999; Ladson-Billings, 2009). Dialogues about the specific influence of a place's physical geography is virtually nonexistent in these fields. It seems physical geography is reserved for the hard sciences (Labaree, 2004). Undeniably, the physical, natural aspects of a place are an integral driving part of what makes a space personal for humans, shaping their experiences with environments in countless ways. Thus, this "open space" for physical geography in the literature offers opportunity to build further counter narratives to the deficit discourses of rural places. When told by children, the rural place and experience there can come alive in all the colors nature provides. Fielding (2001) argued that children should be considered experts on their own lives, and they can offer relevant and valid insights (Punch, 2002) about place and time, mobility and change, and also what the affordances and challenges are of their experience living in a rural place.

Youth on The Shore

One unique rural area in the mid-Atlantic/Southeast of America is The Shore. A coastal region, it is the southern portion of the Delmarva peninsula, which derives its name from the three states that occupy its land: Delaware, Maryland, and Virginia—*DelMarVa*. The Virginia portion, a 70 mile-long area, will be referred to as The Shore. The Shore, a name that embodies its endless stretches of coast and farmland rich with resources, will be the focal rural setting of this unfolding body of research.

The Shore is made up of two counties. Northampton County, with a population of approximately 12,000, has up to 50% estimated to be living in poverty or living at the threshold of poverty as defined by poverty threshold measures aforementioned (United for Alice, 2016; United State Census Bureau, 2018). Northampton County covers The Shore's southernmost tip.

Accomack County shares its northern border with Maryland and has a population of 32,000 with also an estimated 50% living in poverty or at the threshold of poverty. (United for Alice, 2016; United States Census Bureau, 2018). Chetty et al.'s (2014) mobility research categorized 741 metro and rural American places by percentage chance children of that area will reach the top 20% of income distribution given their parents were at the bottom 20%. The highest percentage is represented as >16.8% and the lowest being <4.8%. The Shore is marked in the lowest category percentage. To head north into Maryland and Delaware, the percentage is still low, but improves (The Equality of Opportunity Project, 2019). These statistics do tell a particular story about The Shore as a rural place, but these data do not indicate what mobility means to Shore people, what youth there aspire to and what are their histories, and how the culture and physical geography influence learning experiences, opportunities and choice.

Schools here are few. Northampton county has two elementary schools, both which receive Title 1 federal funds (Virginia Department of Education, 2019b). Title 1 provides funding from state educational agencies to divisions and schools with high percentages of children from low-income homes. The purpose of additional financial support is to help ensure that low-income students who are at risk of not meeting academic standards are provided with additional resources to support their learning (Virginia Department of Education, 2019b). Further, one of Northampton's elementary schools is fully accredited by the state and the other accredited "with conditions" (Virginia Department of Education, 2019a). Northampton County has one high school, which is accredited, and which also houses the accredited "with conditions" middle school grades 7-8 (Virginia Department of Education, 2019a). Accreditation is determined based on state-mandated standardized testing pass rates. Accomack county's 10 of 11 schools are fully accredited, and one is "with conditions" (Virginia Department of Education, 2019a).

2019a). Four of Accomack county's five elementary schools qualify for Title 1 federal assistance, and the county's Tangier Island combined school qualifies for Title 1. Both middle schools receive Title 1 funds (Virginia Department of Education, 2019b).

School choice is limited but does exist. There are not any charter schools, though there are three private schools, one of which provides prekindergarten-12 education (Broadwater Academy, 2019); two serve children pre-K through grade 8 (Cape Charles Christian School, 2019; Shore Christian Academy, 2019). Many families choose to homeschool on The Shore, and home educators can find other families through the Eastern Shore Homeschool Network. There are two Head Start early childhood education facilities, and additionally, there is an East Coast Migrant Head Start which caters to migrant, Spanish speaking populations. One Montessori school serves children ages two to six years old (Montessori Children's House of Franktown, 2019). Opportunities for postsecondary education can be found through Eastern Shore Community College which offers vocational courses and two-year degrees. The nearest four-year colleges or universities are Norfolk State, Old Dominion University, and Virginia Wesleyan University in Norfolk, Virginia, and University of Maryland Eastern Shore and Salisbury University both on the eastern shore, Maryland. While nearby opportunities may not be as abundant as in an urban space, the opportunity for quality education is present for children spanning early childhood into adulthood on The Shore.

These points of knowledge beg the question: What do these statistics and data really mean? What is in them and what is not in them at all? "Do they represent anything, or are they a thing in themselves?" (Gullion, 2017, 41). It takes understanding the history and culture of this unique place, geographically isolated by bodies of water and a costly toll, to understand mobility, aspirations, and the learning experiences of The Shore's youth. Here, the power of place and

spaces and the interrelated concept of time can be viewed from varied lenses: 1) The Shore is a place with high poverty rates. Its formal educational spaces struggle to meet accreditation, and they are in need of federal assistance. Histories of colonization, slavery, segregation, and discrimination have persistent and pervasive effects on next generations. The isolated geography is an additional impediment to mobility. Or, 2) The rural place that is The Shore has resources for living, learning, and experiencing the world that are unique to its physical geography. Open spaces, clean air, rich land, and community structures can foster futures for children. Youth today can provide insight into how they learn and perceive their social and natural world which can illustrate and honor their communities' and families' cultures and histories. A third lens would argue these two perspectives are undoubtedly entangled. Illuminating children's perspectives about living on The Shore can reveal an untapped landscape of knowledge about growing up rural, which can provide alternative perspectives to those discourses that are marked by the deficits of living rural.

Contributing to New Discourses

As noted, scholarship and policy surrounding issues of rural youth are replete with the challenges rural places experience (Edmondson, 2003; Neumann, 2018; Theobald, 1997; Tieken, 2014; Votruba-Drzal, Miller, & Colley, 2016). Donna Haraway (2016) noted, "It matters what knowledges know knowledges...It matters what stories tell stories" (p. 35). The tales that emerge from discourses shape how we perceive and continue to shape what continues to exist. Discourses retell themselves. Chetty and colleagues (2014) found—through statistical and quantitative analysis—an alternative discourse, but what is still less discussed. There are benefits to living in rural places. The affordances and resources that come from vast land, open spaces, and nature can provide environments conducive to physical and mental nourishment. The learned

work of living off the land, more widespread income equality, and the power of supportive and integrated community networks, which are characteristic of many rural places, can provide opportunities for supportive, experiential living and learning.

Spaces are always under construction, never finished or closed, and can always be a place of a story-so-far (Massey, 2005). This is the case for rural places. The purpose of this research was to cultivate alternative discourses, stories-so-far, with children growing up rural. Furthermore, I sought to understand how this geographically isolated place, The Shore, produces formal and informal learning experiences for children that are reflective of the interaction between its specific geography, history, and culture. Arts-based tools and technologies were employed to capture all that is entangled in the creation of environments and the learning that happens there: geography and place, space, culture, histories, and time.

The methodologies employed to address the research purpose became a framework of traditional and post-qualitative ethnographic and sensory methods combined with participatory research with children, all of which were conceptualized through theories of spatiality and new materialism. Theories of spatiality honor space and time at work in place. New materialism unites the intra-actions occurring amongst all physical matter of environment and the meaning that is made from those interrelationships within place. The rural space and place can offer unique formal and informal learning and meaning-making experiences that shape who children are and what their futures can be. Children's perspectives and stories about place can inform curricular decisions and design that aims to increase youth engagement through rich learning experiences.

CHAPTER 2

LITERATURE REVIEW

In this chapter I will review literature related to the presented topic and the guiding purpose for research. First, I will frame the terms space, time, matter and place by conceptualizing aspects of Massey's (2005) spatial theories and the science underpinning Barad's (2007) new materialism, with a specific focus on "intra-action". This theoretical framework will then be used as a lens through which to recount histories of migration and settlement which have led to who and what reside on The Shore today. From the telling of stories-past, various cultures and peoples who have migrated to Mid-Atlantic America, with a specific focus on Virginia and The Shore, will be illustrated. These details will include languages spoken, skill sets, gender and child roles, belief systems, and actions for power and loss. Physical geography is ever-woven into these stories; without it, no stories can be told as no place could exist. Descriptions of the physical geography of The Shore will be further included to account for the power of water and earth. Oftentimes, social science research omits the influence of matter in the form of nature just as it has omitted the stories of those with less power.

Hence, participatory research methods with children will next be introduced to create a triangulated conceptual framework and a focus for analyzing selected studies with children. I will explore the gathered empirical research with children to examine successful methods and materials utilized that bring forth children's perspectives about their environments, place, conceptions of time and change, and meaning-making, or learning. A special critique used to assess the literature will ask, "In what ways are time, space, and place considered and discussed in the gathered research and literature?" To close, I will unify the related research with the

presented conceptual framework and discuss the need for research, which will lead to Chapter 3, Research Methodologies.

Spatiality and Materialism: Theories of Time, Space, Matter, and Place

The research question: *In what ways are physical geography, history, and culture interacting?* unlocks discourses that are intrinsically inter-connected with these three components meant to be explored. When geography, history, and culture are triangulated and blended with concepts of time, space, matter, and place, the boundaries between meanings become blurred. Place can become amplified, three-dimensional, active—an open, living trajectory existing as at once space and time, full of agentic, interrelated matter, with every moment containing all other moments (Barad, 2018; Massey, 2005)

Physicist Karen Barad (2018) turned time into poetry:

A pine tree is time. And bamboo is time. Mountains are time. Oceans are time. If time is annihilated, mountains and oceans are annihilated. Time itself is being and all being is time. In essence, everything in the entire universe is intimately linked with each other as moments in time, continuous and separate...Time is diffracted. Entanglements of past, present, and future, super positions of now, then, to come caught up in and performing iterative undoings of the self in its sedimenting historicities.

Indeed, theories of time, space, and matter illuminate the coexistence of multiple material histories at once condensed into singular moments and in turn, sending matter, space, and time off into unique and differing trajectories. All that exists to make up a moment lives within each other, interacts, and creates change (Barad, 2018; Massey, 2005). Furthermore, while theories of space and time and theories of matter and time parallel each other in academic discourses, the two also live within each other, mutually supportive, offering each other language to provide

robust cognitions of events in history and their space-settings that led to the material discursive state of places.

Commonly, tales of human exploration are told from the perspective of voyaging across and conquering space (Massey, 2005). This equates space with earth's surfaces of land and sea. Arguably, this lens leads humans to view space as a static surface, made real by the people and cultures who create place. Space is made immobile by these human tales-a source of transportation and obstacle, a path to be treaded or sailed, a source of discovery and learning to be interpreted and written and told. Indeed, space as a surface affords these to people. The evervarying unique geographies offer innumerable pathways to places. However, perceptions such as these stifle space. Instead of thinking of space as just a surface, conceive it as a "meeting-up of histories" (Massey, 2005, p. 4). Thus, blended and integral is time. Explicitly, space is not a mere surface; it is a product of interrelations, from the most microscopic energies to macroscopic (Greene, 2004). Space is the embodiment of multiplicity with distinct trajectories coexisting. Space is always changing, always under construction, always a process, and never finished (Massey, 2005). Massey called this unfinished-ness of space stories-so-far. By story, Massey implies the history, movement, and change of things themselves. Re-imagine space-time as a multiplicity of trajectories, of stories, open to the future. Spatiality as open, multiple and relational, can then be a prerequisite for history to thus be open too. History is told and retold to ascertain the different trajectories that occurred, are still occurring. The stories of the past can remain open, unfinished as the present retells and uncovers stories left untold.

Considering history, early western philosophy began capturing time by using sequences of numbers. This was thought of as time's spatialization. But Barad (2018) asks, "How does 1492 live inside 1945 and vice versa?" If a moment in history is captured as number, can it simultaneously be captured in all of the other dates and moments that connect to a similar trajectory? While Massey argues for the limits of numbers (dates), I argue for the fantastic representations numbers can also be, even as I previously questioned statistics, as this argument aligns with the theory that space is a constant multiplicity, perhaps numbers are too, as Barad suggests. Moments in history are indeed loaded, as are dates and numbers, and if history is difficult to represent temporally, then time-space as history/geography is even more of a challenge (Laclau, 1990; Massey, 2005). But what about place?

Place is the portrait of time-space—photographic images of peopled, politicized, cultured moments. Place contains all the material and discursive trajectories of a time-space (Barad, 2007; Massey, 2005). Place changes over time and space. Place becomes personal. It is a spatiality that is a production of memory and emotion, intimate, known, a sphere of everyday routine, of valued and real practices, "the geographical source of meaning" (Massey, 2005, p. 5). Places are economies of deep interrelationships and ecologies. Places are iteratively created (Anderson & Jones, 2009). Place is where culture is born and thrives. However, here is where I discontinue Massey's description of place: Massey's place is closed; it is a locus of ownership; it is conservative and fearful; it does not acknowledge the underlying forces producing the place (p. 5-6). In contrast, Foucault (1986) explained:

The space in which we live, which draws us out of ourselves, in which the erosion of our lives our time and our history occurs, the space that slaws and gnaws at us, is also, in itself, a heterogeneous space. In other words, we do not live in a kind of void, inside of which we could place individuals and things. We do not live inside a void that could be colored with diverse shades of light. We live inside a set of relations that delineates sites

that are irreducible to one another and absolutely not superimposable on one another. (p.

23)

This research aims to open up place as synonymous with space and time and matter. It aims to redefine the closed viewpoint of place as *mine*, and as Foucault (1986) stated, "draw us out of ourselves" into a "heterogeneous space" (p. 23). When the mutual and heterogeneous forces that create spatiality are illuminated in place, place becomes open. The material of place has agency to act across a flat ontology (Barad, 2007) and change. Futures of place have yet to become.

Now, if history relates to time and space and culture is situated in place, then how does one conceptualize physical geography beyond that static surface Massey (2005) described? The earth, the trees and plants, all the critters, the indelible rocks and water and air and sun that exist simultaneously in time and space with a temporality and longevity that marks all matter as distinct and active speaks through physical geography. When Massey theorizes the multiple, interrelated, and simultaneous stories-so-far that make spatiality, she honors the lively materiality of all things, the vibrancy of matter (Bennett, 2010), as all matter are actants in and of themselves (Bennett, 2010; Latour, 2004). Massey's space must, too, be made up of actants: sources of action that can be human or non-human, and that which have the ability to produce effects, make a difference, and change the course of events (Latour, 2004). Vibrant matter (all matter) is not passive stuff that must be set in motion by agentic humans; instead, matter is "selftransformative and already saturated with agentic capacities" (Coole, 2010, p 92.). Barad (2007) defines this through the intra-actions of agential realism, as intra-actions are the "mutual constitution of entangled agencies" (p. 33). Further, nothing precedes the other and agencies are only distinct when regarded in relation to their mutual entanglement with other agencies. Nothing exists as individual elements and thus, the intra-actions that make up Barad's agential

realism are what create and produce spatiality. Physical geography is the collection of all natural, physical, tangible vibrant matter (Bennett, 2010), ever-changing, ever-transforming as a result of infinite interactions continuously occurring in spatiality—time, space, and place. Physical geography reminds us of the scientific origins of Barad's new materialism—the intricacies of agentic particles and the wonderful possibilities of diffraction in the most physical sense (Barad, 2007). Particles have the capacity to act like waves of light or water, energetically moving through space, causing disturbance patterns and change, entangling, leading to new energies, directions, diffractions (Barad, 2007). No longer are the earth and sea a surface to be traversed and conquered, and now they become active and influential, producing and shaping all other life and matter residing amongst, within, and upon it.

With these perspectives on spatiality and matter now situated, yet open, what comes next are the histories of a particular place. We begin with before humans interacted with the space and time of this place, which shaped what it is today. Woven into these tales of space and time is the agential power of matter, embodied as the physical geography that produced, attracted and provided, was treaded and colonized. As dates and demographics are included, the reader ought to pause to ponder every moment and meaning that could possibly be in that number, in particular, what is left un-told. As tales of voyage and discovery take us across earth's surfaces, spatiality and materialism illicit the conception that the non-human, the living and non-living backdrops of humans' stories are all intra-acting to produce three-dimensional maps of landscapes. From wind and sun, earth's rotations and tilt, revolutions counting years to the ebb and rise of tides and lost artifacts hidden and found, these all give clues about what time and space have hidden and can reveal.

Rural Landscapes Across Time, Space, and Place

As Geography without History seemeth as carkasse without motion, so History without Geography wandereth as vagrant without a certaine habitation.

Captain John Smith, 1624 (Barbour, 1986 in

McCartney, 2007)

The wide and long peninsula in the mid-Atlantic region of America is a place of relatively mild climate, with long months of warmth which sustain rich growing seasons (Rountree, 1990). Surrounded by oceanic bodies—the Chesapeake Bay to the west and the Atlantic Ocean to the east—The Eastern Shore of Virginia has countless rivers, creeks, and estuaries teeming with sea life and waterfowl (Rountree, 1990). Heavily forested at one time, and still much flora in this rural place, this space provides bounty for living and thriving (McCartney, 2001, 2007; Rountree, 1990). Waterways were and still are often the best roads (Rountree, 1990). The east side, the side which meets the Atlantic Ocean is speckled with barrier islands which create a cushion against ocean forces and a unique topography (Shao et al., 1998). Each barrier island along the east coast of the peninsula has two distinct landscapes: on the interior, vast expanses of marshes exist with small bays and tendrils of waterways; on the west ocean side, there are grass-covered sand dunes and swales (Shao et al., 1998). These islands have coniferous and hardwood forests and today are minimally populated to not at all. In particular, Hog Island, which once many decades ago, was a thriving community, has been overtaken by the forces of the sea (Spione, 2008; Shao et al., 1998). The west side of the peninsula meets the Chesapeake Bay at huge bluffs speckled with pine and live oak. Oyster laden rivers and creeks lead into the land, offering calm waters and good places to settle (Rountree, 1990).

The people that have migrated and settled here comprise a distinct racial and ethnic makeup that is reflective of the migration patterns that have occurred over the course of thousands of years. Specifically, the people of Northampton and Accomack counties are 55-60% White; 29-34% Black; and 9% Hispanic/Latino; with other racial and ethnic origins having very small percentages. In particular, Native Americans are reported as .02% of The Shore's population (United States Census Bureau, 2018). What circumstances and spatialities brought today's people to this place, The Shore? Who migrated away or died across the changes produced by space, time, and matter? Who and what are part of the common histories told; and, who and what have yet to tell their tales of trajectory?

Theorized Beginnings of Population

Humans have been moving around the globe for thousands of years. A leading theory of migration and first settlement in America describes peoples from eastern Asia crossing the Bering Strait, approximately 16,000 years ago (Barton, Clark, Yesner, & Pearson, 2004; Hakim, 2005, Jakobsson et al., 2017; Roberts-Artal, 2017). Today Alaska is disconnected from Russia by an 18-mile wide strip of icy sea (Figure 1), but at one time, many scientists believe these waters were a grassy land rich with woolly mammoths, or ice age Bison, and other animals ripe for hunting (Davis, 2003; Hakim, 2005). This long-gone earth bridge, approximated at 1,000 miles thick, is now referred to as Beringia, and was thought to be a good place to live, providing the resources humans needed for good health and further travel south into North America (Hakim, 2005, Roberts-Artal, 2017).



Figure 1. Map showing the Bering Strait. (Roberts-Artal, 2017)

These first migrants are now referred to as the Clovis people, and they are considered the ancestors of native Americans (Davis, 2003; Hakim, 2005). However, there is debate that these were not the first people of America. In 1974, fishermen scraping the ocean floor for scallops off the coast of the Chesapeake Bay caught a mastodon skull and a flaked blade of volcanic rock in their nets (Davis, 2003; Ghose, 2014; Hakim, 2005). Once archeologists were aware of the specimens, they used carbon dating (measuring the fraction of radioactive carbon isotopes, or elements of carbon with differing neutrons)¹ to determine this cousin to the woolly mammoth and the flint tool date back approximately 22,000 years (Davis, 2003; Ghose, 2014; Hakim, 2005). The flaked blade and mastodon skull both showed known signs of aging due to air, saltwater marsh, and also the ocean (Ghose, 2014). At this time there is no other DNA evidence that suggests populations of peoples other than the ancestors of the Clovis people, who are commonly called Native Americans, lived on the east coast of America. These findings do indicate the possibility of human life in Virginia that dates back over 20,000 years and open the

¹ As matter ages, its make-up of radioactive carbon changes over time which can be seen through the amount of neutrons it has. Research has shown that the change of neutrons shows consistent patterns as matter ages, allowing scientist to make approximates about the age of organic matter (Currie, 2004).

door to differing questions and possibilities about travel and migration from places other than Asia, such as Europe.

What history can tell is that Native Americans, the ancestors of the Clovis people, thrived for thousands of years before Europeans began settling and building colonies in the 16th and 17th centuries. In the mid-Atlantic/Southeast that is now Virginia and surrounding areas, natives were called the Eastern Woodland people because vast, thick forests covered the land (Hakim, 2005). The Eastern Woodland name encompasses many tribes of peoples and languages they spoke (Hakim, 2005; Rountree, 1990). Natives of Virginia's coastal regions spoke the Algonquian language (Rountree, 1990). Life here was good. Woods were teeming with beaver, raccoon, deer, possum, and bear (Hakim, 2005; Rountree, 1990; Smith, 1986; Strachey, 1953). The coasts were rich with fish and oysters, the latter an iconic symbol today of coastal Virginia (Beck et al., 2011). The land was tillable and while men typically hunted, the women were the farmers, cultivating corn, beans, squash, and pumpkins. Wild grapes and nuts were ripe for children to gather (Hakim, 2005; Rountree, 1990; Smith, 1986; Strachey, 1953). Clothing was oftentimes simple, especially in warm months, but makeup and jewelry were elaborate. Eastern Woodland natives' bodies could be covered in tattooed designs and hunters would paint themselves with bright colors and make their skin glisten with bear fat. To become more handsome, men might blacken their teeth with tobacco ash. Hair was cut and shaved with sharp shells and adorned with feathers (Hakim, 2005; Rountree, 1990; Smith, 1986; Strachey, 1953). Bracelets and necklaces were made of pearls or animals bones bent and shaped. It was a culture that lived from, by, and of the land—a culture and peoples that thrived with the environment for centuries (Davis, 2003; Hakim, 2005; Rountree, 1990).

Natives occupied the peninsula that is today's Eastern Shore of Virginia for thousands of years as well before the first English settlers arrived (Foreman, 1975; Kellam, 1986). Historians surmise that Eastern Shore Natives migrated from south from Pennsylvania and across the Bay from the western shore. Many artifacts found on The Shore from as early as 6000 B.C. were made from quartzite, a metamorphic rock, which is native to The Shore. However, some artifacts found show to be made of rhyolite, a form of granite native to Pennsylvania, and jasper, a variety of quartz common in New Jersey (Kellam, 1986). Trade is certainly likely to have been occurring between areas and regions, but historians argue that many artifacts native to other areas were brought from migrating peoples (Kellam, 1986).

At the time of English settlement, there were many small tribes which spoke the Algonquian language of the Powhatans on The Shore, which included the Magothas near Cape Charles, the Mattawames at Eastville and the Nuswattocks by Nassawadox Creek (Rountree & Davidson, 1997; Walczyk, 2004). Additionally, there were the Occohannocks, Curratocks, and Accomacs (Whitelaw, 1968). The tribes of the lower Shore were ruled by the Emperor of all the Indians of the Lower Shore, Debedeavon. Debedeavon regularly gathered the chiefs of other tribes to council and he would collect three arrowheads and eight bushels of corn per year in tribute to the service of maintenance and protection. There were several other tribes whose names have become named places of The Shore such as the Machapungoes and Chincoteagues (Rountree & Davidson, 1997; Walczyk, 2004).

European Exploration and Settlement

When European colonizers began coming to America, a great irreparable shift began to occur for the land and its indigenous peoples. The Virginia Company of London crossed the Atlantic in a fleet of three ships with the goal of establishing a colony in what they called the New World. The year was 1606 (Davis, 2003; Mello & Schlesinger, 2000; Richter, 2011). After a stop in the Canary Islands (Mello & Schlesinger, 2000), the *Susan Constant, Discovery*, and *Godspeed* (Cook, 1937; Davis, 2003) sailed up the east coast of the Americas and landed at what they named Cape Henry, a point of land where the Atlantic Ocean meets the Chesapeake Bay as John Smith (2006, 1607), explorer, cartographer, and writer, described:

There is but one entrance by Sea into this Country, and that is at the mouth of a very goodly Bay, 18. or 20. myles broad. The cape on the South is called *Cape Henry*, in honour of our most noble Prince. The land white hilly sands like into the Downes, and all along the shores great plentie of Pines and Firres. (electronic edition)

Guided by captain Christopher Newport, with John Smith aboard, the fleet set out to explore what is today known as Hampton Roads (Davis, 2003; Haile, 1998; McCartney, 2001). In their expedition into the Chesapeake Bay, they found an outlet river which they named James in honor of King James I of England (Haile, 1998; McCartney, 2001). Sailing upriver the colonists finally chose what is known as the first lasting settlement by the English—Jamestown (Davis, 2003; Haile, 1998; McCartney, 2001). This was not the first settlement by Europeans, as Spain, Portugal, England had all been voyaging to the Americas since the 15th century, but it would be one of the most impactful (Davis, 2003; Richter, 2011).

Jamestown had saturated marsh lands which were breeding grounds for mosquitos and brackish water unsuitable for drinking (Davis, 2003; Haile, 1998; McCartney, 2001, National Park Service, 2015). It was difficult to grow food there, and the settlers were not wellexperienced in agriculture and other survival skills necessary to build a colony (Haile, 1998; McCartney, 2001). They relied heavily on the indigenous peoples, the Powhatan, though many died in these early days from starvation and disease (Davis, 2003; Haile, 1998; McCartney, 2001). However, over the first few years, three ships arrived bringing supplies, women, and a man named John Rolfe, who carried with him tobacco seeds from Bermuda, and despite its difficult beginning, the colony began to thrive (Davis, 2003; Haile, 1998; McCartney, 2001; NPS, 2015).

It did not take long to create a colony on The Shore. In 1614 John Rolfe wrote in "A Relacon of the State of Virginia" that there was a settlement of seventeen English colonists on the Eastern Shore at "Dale's Gift" which was near what they called Cape Charles at the southern portion of the large peninsula. The settlers were there to make salt from seawater and catch fish for the "Jamestownians" (Forman, 1975; McCartney, 2007). Of this settlement was Thomas Savage, who is considered the first Englishman of The Shore. Just a child, he was brought to Jamestown in 1608 at thirteen years old and came to speak the Algonquian language fluently, as he was traded to Chief Powhatan for a native boy. With Powhatan's adoption of Savage, he developed the skill of being an interpreter between the English and natives. However, rivalries ensued, and Savage was sent to the safer Eastern Shore where Debedeavon gave him an area of land that came to be known as Savage's Neck (Foreman, 1975; Whitelaw, 1968; Wise, 1911). After Savage and these first salt settlers, many English came to The Shore because of its bounty and tillable land—tillable for what came to be the economic foundation of this New World: tobacco (Foreman, 1975). Tobacco changed the land and created an economy that fueled times of rapid growth which cultivated the English language and the spread of Christianity (Davis, 2003; Guasco, 2014), colonial architecture, culture (Foreman, 1975), and new notions of power and who is powerful (Davis, 2003; Deetz, 2019; McCartney, 2003).

Negotiations between the natives and early settlers can be found in court records of both Northampton and Accomack, which house some of the country's oldest court records. Records report deals that ordered plantation owners to pay natives six match coats, and agreements that no one should murder or steal from one another. Later, grievances against the English were registered by natives for English acts such as not allowing natives to hunt beaver on their lands (Walczyk, 2004). Natives' belief systems regarding land led to the greatest divide between them and the Europeans. Europeans believed in land ownership and the Natives believed that the land was for all and should be left as untouched as possible (Rountree & Davidson, 1997; Shorebread, 2012).

The decimation of the Eastern Shore tribes was certainly in part due to disagreements, colonization, and the occupation of land for farming (Rountree & Davidson, 1997; Shorebread, 2012). Another large factor was the diseases the English brought with them from Europe to which Native Americans had no immunity: measles, influenza, smallpox, and whooping cough. Viruses killed a significant amount Native Americans during the days of early colonization (Rountree & Davidson, 1997; Shorebread, 2012). As populations of natives dwindled towards the end of the 1600s, tribes often disbanding and joined neighboring groups, some as far north as Pennsylvania. Those who remained ended up on reservations, but by 1800, no reservations were left on The Shore (Rountree & Davidson, 1997; Shorebread, 2012).

The Arrival of Africans

The transatlantic slave trade had been going on for more than a century among European nations, beginning with Spain and Portugal, who were using slaves to help build their new colonies in Brazil and Uruguay (Davis, 2003; Deetz 2019; Guasco, 2014; McCartney; 2003; Waxman, 2019). Great Britain soon followed the practice, as did those trying to colonize the New World (Davis, 2003; Guasco, 2014; McCartney). The English ambushed a Portuguese ship leaving present-day Angola with some 350 Africans already taken against their will as prisoners of war, capturing approximately 20 (Deetz 2019; Waxman, 2019). These Africans were the first to be brought to the Jamestown colony, arriving at Point Comfort, known today as Hampton, Virginia, in 1619 (Berlin, 1998; Deetz, 2019; Guasco, 2014; McCartney, 2003; Waxman, 2019). John Rolfe recorded the event, writing:

...a Dutchman of Warr of the burden of a 160 tunnes arrived at Point Comfort, the

Commandors name Capt. Jope. He brought not any thing but 20. And odd Negroes, w[hich] the Governo[r] and Cape Merchant bought for victuals (Deetz, 2019).

This is one of the only documentations of a supreme event in America's history, and it merely captures the number of Africans that arrived. No names. No identities. Perspectives lost in time (Deetz, 2019).

Based on census reports, two of these first Africans were called "Anthony," and "Angela" (Berlin, 1998; Waxman, 2019, William Tucker Society, 2019). They became parents of "William," who is the first African-American documented as being born in America. William took the last name of Tucker, his overseer, which was commonplace (Deetz, 2019; McCartney, 2003). Many of William Tucker's descendants remained in the Tidewater region of Virginia where he was born, and some of which are buried in a family cemetery in Hampton, Virginia, which is cared for by the William Tucker 1624 Society (William Tucker Society, 2019). Little is known about William Tucker and his parents, though a cowrie shell found at Angela's site was probably significant to her, as in west Africa these artifacts were used for currency, jewelry, and religious practices (Deetz, 2019).

Historians surmise that these first Africans spoke variations of the Bantu language (Berlin, 1998; Deetz, 2019), however documented names were often of Spanish origin and likely assigned to them while aboard the Portuguese capturing ship. Census reports more commonly show Africans being identified and counted not by name but by race (Berlin, 1998; Deetz, 2019; Waxman, 2019)—the knowledge of the first African child, William Tucker, is unique to the documentation of this history. The English further identified Africans based on the needed skills they brought with them, which included iron work, masonry, glass-making, weaving, and most importantly, agriculture (Berlin, 1998; Deetz, 2019; McCartney, 2003). In these earliest times of colonization, slave laws were not yet in place, and Africans could work towards freedom as indentured servants and their contracts afforded land, a year's worth of corn, clothing, and weapons (Berlin 1998; McCartney, 2003; Waxman, 2019).

The first recorded Africans of The Shore, Anthony and Mary Johnson, were, in fact, free, and left Jamestown in the first half of the 17th century to venture to the Northampton County area with their four children (McCartney, 2003; McCartney, 2007; NPS Ethnography, 2019). Free Africans, just as the colonists, found The Shore to be a good place to raise livestock and crops such as corn and tobacco and dispersed themselves along the numerous coves, inlets, and creeks and used these abundant waterways for travel much more than roads, which were limited.

In these early days of settlement, before chattel slavery was legal in Virginia, marriage among both Africans and English increased social standing. Marriage and kin networks maintained West and West Central African lineages, however Africans did marry English (Brown, 1996; McCartney, 2003). Free Africans often held family members under ownership to protect them from being sold (McCartney, 2003; National Park Service, 2019; Russell, 1913/1969). For example, free African men often purchased their wives who were enslaved and held wives and born children in ownership (McCartney, 2003). In turn, Russell (1913/1969) noted that free African women did purchase their enslaved husbands and daughters as property as well. Before 1662, children of interracial marriages were born free, but after, if a child was born from an enslaved mother no matter that race of the father, that child was a slave (McCartney, 2003; Morgan, 1975). Still, after slavery was widely practiced and legal, marriages between slaves were common and owners saw that slaves were united in religious ceremony (Breen & Innes, 1980; McCartney, 2003). These histories can be seen as stories of protection and deep bonds of kinship, just as they can be told through perspectives of desperation, power, and objectification.

By 1661 slavery became legal and the colonial elite had turned towards Africans for free labor and greater personal profit (Berlin 1998; McCartney, 2003; Guasco, 2014). In this "New World" slavery became hereditary and permanent. Children were born slaves. Enslaved families could be split and sold as property. The growing tobacco economy led servitude to enslavement of Africans, who no longer could buy their freedom. Seventeenth century plantations on The Shore, as in other places in Virginia, had separate quarters for slaves. Slaves lived in groups under an overseer's supervision. Corporal punishment was inflicted to control, and many were malnourished and not given enough clothing (McCartney, 2003; Morgan, 1975). Into the 18th century, news reports and court records from Northampton and Accomack counties are fraught with stories of runaways. Often, groups would attempt escape together including women and children ((McCartney, 2003; Morgan, 1975; NPS Ethnography, 2019), and reports also indicated that Africans at times fled to take refuge with natives (McCartney, 2003). Figure 2 shows a court record addressing runaway slaves in 1751 and Figure 3 shows the news article related to it.

The Examination of Tabitha Shavers

Court held May 29th, 1751, for the examination of Tabitha Shavers on Suspicion of Felony.

Present Edmund Scarburgh Anderson Patterson, Thomas Parramore Edmund Allen & William Bagge Junr. & James Rule.

Tabitha Shavers being set to the Barr under the custody of the Goaler & examined in Relation to a Felony said to be committed by her, said that she went in Company with those Negro Men [two?] belonging to Colo. King & one belonging to James Pettigrew & one Hamlot Robinson a Servant belonging to William Andrews in a Canoe to an Island in the Bay and came from thense in a Boat which they found at the said Island and then went to the Sea Side and took a Boat belonging to Mr. Abel Upshur in which they were taken and having examined the said Tabitha relating to other Felonies said to be committed It is the opinion of this Court that she be discharged of the said Felony.

Figure 2. 1751 Accomack County Court Record Tabitha Shavers (The Geography of

Slavery, 2019a)

Virginia Gazette (Hunter), Williamsburg, May 24, 1751.

May 18, 1751. RAN away on the 14th Instant, from Pocomoke River, in Accomack County, Two Negroe Men, belonging to Robert King, of the said County, one named Dollar, about 21 Years old; had on when he went away, a Grey Fearnaught Wastecoat, Virginia-Cloth Breeches, Stockings, Shoes and Hat; the other a short well-set Fellow, named Greenock, about 23 Years old; had a grey Frize Coat, Breeches of the same Cloth of the other Fellow's, with Shoes, Stockings and Hat: They are Brothers. Whoever apprehends and conveys them to their said Master, shall have Two Pistoles Reward for each, if taken in Virginia, and Three if in Carolina, besides what the Law allows. Also ran away from the said Place, at the same Time, and suspected to be in Company with them, a Mulatto Man and Woman, belonging to James Pettigrew, of the said County; the Fellow is about 25 Years old, has a large Scar over his right Eye, in the Shape of a half Moon he is a strong active Fellow, named James: the Wench is young, and named Tabitha. Whoever apprehends and conveys them to their Master, shall have a Reward of Three Pistoles for the Fellow, and half a Pistole for the Wench, besides what the Law allows. Likewise, ran away from the said Place, at the same Time, and suspected to be in Company with them, a Mulatto Boy and a Negroe Woman, belonging to William Andrews, of the said County, the Boy is about 7 Years old, named Hamlet Robertson, the Wench is small, about 35 Years old, named Pleasant. Whoever apprehends and conveys them to their Master, shall have a Reward of Two Pistoles, besides what the Law allows. They are armed with Guns, &c. and have broke open several Houses in the said County, committed Felonies, have taken a Canoe, and 'tis imagined will take the first larger Vessel they meet with, in order to cross the Bay. Robert King. James Pettigrew. William Andrews.

Figure 3. Virginia Gazette news article describing runaway slaves, 1751 (The Geography

of Slavery, 2019b).

Court records and news reports such as these were common during the 18th century on the Eastern Shore of Virginia (The Geography of Slavery, 2019a). Other records describe crimes accused of African-Americans such as murder, rape, and stealing, where the accused pled not guilty, but ended in lashings and hangings (The Geography of Slavery, 2019c, 2019d, 2019e).

Despite the consequences, escape was a component to African American culture on The Shore, which was a part of the Underground Railroad escape system in the 19th century. The Chesapeake waterways being an integral component to transportation North (The Chesapeake Bay Program, 2019). Captains of ships smuggled runaways aboard on their way towards Maryland and Delaware as well as slaves working on boats secretly hid escapees. After the Civil War and the abolishment of slavery in the1860s, many African Americans found work on these waters and the fishing industries of the Chesapeake Bay (The Chesapeake Bay Program, 2019). Oysters became a primary resource and industry, which needed strong labor (The Chesapeake Bay Program, 2019). With the low start-up costs for a new waterman and the need for fishermen, many newly freed Blacks came to the region. Along with opportunity for harvesting the Bay's resources, many found work processing other fishermen's catches and building boats. Thus, African American communities continued to reside along The Shore, building its economy and kinship networks (The Chesapeake Bay Program, 2019).

Today, The Shore has a continued strong presence of watermen of both African and English lineage and communities remain largely segregated. For example, Pungoteague, where Governor Ralph Northam was raised, is predominantly white, while the nearby communities of Boston and Little Hell are African American (Schneider, 2019). From Africans' American beginnings, the social construct of race became closely tied to rights and worth and power, and though the abolishment of slavery in 1860 after the South's loss of the Civil War marked, finally, a turn toward a more equal America, progress and change do not happen quickly (Deetz, 2019).

Hispanic Migration

Native Americans, English, and Africans are not the only groups to have migrated to America, Virginia, and The Shore. European Spanish had been immigrating and colonizing South America and southern America (Florida), and south western regions for over a hundred years before the English came (Deetz, 2019), spreading their language (Arreola, 2004) and Catholicism (Berlin, 1998; Davis, 2003; Guasco, 2014; Richter, 2011;). Hispanic populations have also been migrating to regions of northern North America dating back before the 17th century, and human geographers have noted that Hispanics are "one of the oldest and one of the newest groups of American immigrants" (Arreola, 2004, p. 13). Hispanics include people from Latin American countries which include Mexico, Central America, South America, and Spanishspeaking Caribbean (Bodvarsson & Van den Berg, 2009). Indeed, Hispanic, or Latino, origins do not denote one people, but many. As sixteenth century Europeans from Spain came to dominate Latin America from South America up through Mexico and the Caribbean, different subgroups and identities entangled to make Hispanic/Latinos a population diverse in many cultural ways. The Spanish language is considered "the glue that holds Hispanic/Latino populations together and gives them a common bond and unifies them as an ethnic people," however, there are a wide array of variations in the language depending on from where the speaker's origins are (Arreola, 2004, p. 16). For example, Caribbean Spanish can be quite different in vocabularies and consonant annunciation from Puerto Rican, Mexican, or Central American Spanish.

The United States has continued to see rapid growth of Hispanic immigration, with populations being relatively young compared to other groups of Americans (Arreola, 2004). In

recent years, Hispanic immigrants have increasingly been settling in Midwestern and Southern states seeking work in food processing and other manufacturing industries (Bodvarsson & Van den Berg, 2009). Schaefer et al. (2016) and Jones et al. (2016) both reported that traditionally Black areas are beginning to see significant growth in the Hispanic population in the Southeast. Since the 1960s, Hispanics have accounted for the majority of arrivals to the United States (Bodvarsson & Van den Berg, 2009) with American Latino populations having increased from 6.3 million in the 1960s to 56.5 million by 2015 (Flores, 2017). In the early 1990s, farmworkers in the eastern U.S. became largely Hispanic, and relied on seasonal migration north and south of the east coast to find agricultural work in farming industries planting, cultivating, harvesting and processing crops to sell, and caring for animals. This region is called the "Eastern Migrant Stream" (Arcury & Marin, 2009). Quandt, Preisser, and Arcury (2002) found that migrant farm workers often live in camps and move and return to camps based on availability of work. Near the turn of the 21st century, Rothenberg (1998) estimated that migrant farmworkers earned less than \$5000 per year, far under the poverty threshold. Because of the constant moving to find agricultural work, children, too, move with their families, and this patterned uprooting has shown to have long term effects related to educational attainment and adult mobility in terms of occupational and economic choices (Romanowski, 2010).

In the late 1950s farmers of The Shore began relying on primarily Hispanic migrant workers to plant, tend, and harvest their crops and help care for livestock (Sills, Alwang, & Driscoll, 1994; Virginia Council of Churches, 2019). By 1960, there were approximately 55 migrant camps on The Shore (Virginia Council of Churches, 2019). With the upsurge of migrant workers seeking work and providing economic support to The Shore (Sills et al., 1994), Christian hubs began reached out to support these populations who lived on minimal pay and poor housing conditions in the form of home visits, education, Christian teaching, and crisis intervention (Virginia Council of Churches, 2019). Reports from various sources in late 20th century have described the camps where migrant workers lived as having very poor conditions with their barracks-style construction, closely packed bunk beds, communal showers, toilets, and kitchens, and in general, close quarters leading spread of illnesses (Lopez & Legato, 1997; Koebel & Daniels, 1997; Morgo, 1991; Neville, 2019).

As Hispanic migrant populations increased in the latter 20th century on The Shore, various religious councils have made contributions to the well-being of these migrant groups (Neville, 2019; Virginia Council of Churches, 2019). For example, Spanish-speaking seminarians were recruited to join ministries to be able to further support these new populations (Neville, 2019; Virginia Council of Churches, 2019). Childcare and education became a critical issue to the migrant community, as parents needed their children to have a safe place to go and learn too while they were working. In 1952, the first day school/childcare center with paid staff opened in the Cheriton chapel, near Cape Charles. Religious groups continued to add more day care programs to ministries which are evident today throughout Northampton and Accomack counties (Virginia Council of Churches, 2019).

Additionally, Head Start expanded, and in 1974 created the East Coast Migrant Head Start Project, and in 1983, created the Eastern Shore Migrant Ministry Committee (East Coast Migrant Head Start, 2019; Virginia Council of Churches, 2019). These groups assisted with building a center that could accommodate 75 children in Northampton County. In 1991, the center was further expanded. By 2003, the Council-supported Migrant Ministry included four childcare centers with the capacity to care for 270 children (Virginia Council of Churches, 2019). Children experience migration from Florida, moving up the coast towards Delaware and even further North following harvests, so the goal of the childcare centers is to support feelings of safety and constancy (Neville, 2019; Virginia Council of Churches, 2019). Today, the East Coast Migrant Head Start further supports The Shore's migrant children and releases an annual report. To illustrate the fluctuation of enrollment based on agriculture and migration patterns, their 2018 report showed children served in February was 814, and service incrementally increased by month until in October the number of children served was 2157 (East Coast Migrant Head Start Project, 2018). As the growing season concludes, enrollment decreases. Other secular programs now serve The Shore's migrant children during summer months as well, such as the Barrier Islands Center in Machipongo, which hosts summer field trips to the museum where migrant children are offered music lessons, art classes and local history stories (Barrier Island Center, 2019).

Garza, Reyes, and Trueba (2004) reported on the Hispanic immigrant experience: The immigrant who comes to the United States from a rural village or small town in Mexico or Latin America is often completely overwhelmed by the contrasts found in modem U.S. cities. In many Latino communities, the cultural worldview of the church, the society, and the school are all one and the same. The major institutions are in agreement about who you are and how you are to live your life. (p. 4-5)

The experience of leaving one's home country in search for a better life, economic opportunity, or being brought by force is complex and life-altering. Leaving a familiar homeland, family, and friends can be traumatic (Garza et al., 2004). Today, crossing borders without documentation is expensive and dangerous. Many have been robbed, raped, beaten, and left for dead coming to the United States, and children are separated from their families. Many come to the United States fleeing war and fear government authority. Acculturation processes require language skills and

acquisition of the host society's values and behaviors (Garza et al., 2004). Garza et al. (2004) noted the importance of retaining home language for personal integrity and identity, and to be able to communicate to the next generation values and customs is critical for psychological health. "Native languages, cultures, religions, art, values, lifestyle, family organization, children's socialization patterns, and worldview constitute the survival kit for many immigrants" (p. 5). However, much of the history of American immigration tells us, in particular, with the Portuguese and English changing African's names to Spanish and English ones (McCartney, 2007) and the decimation of Native American populations, that the honoring of diverse perspectives and home cultures has been a struggle for colonizers for centuries. Still, diversity of cultures' and groups' histories characterize what America is today, deeply embedded into who Americans are as a collective group of people. Just as the term *Hispanic* means a variety of origins, so does *American*.

Children

These histories provide understanding about the make-up of the Eastern Shore of Virginia today and its surrounding region. The multitude of simultaneous trajectories of change parallel and intersect to continuously reshape the current and ever-changing place. However, much is still missing. Interestingly, of all the historical research gathered about early migration, settlements, The Shore and surrounding region, and these four groups of peoples—Natives, English, African, and Hispanic—the more current literature related to migrant farmworkers was the only literature that noted any interest in or empathy for children's experiences. Childhood is virtually silent in these formal American histories, not unlike the deficit discourses describing rural issues and the effects of those issues on children, childhood, and mobility. Though, children do appear in history as can be seen through the circumstance of Thomas Savage, the thirteen-year-old English

boy who became an object of exchange between the English and natives. The native child he was exchanged for has been left nameless (Rountree, 1990). News reports of the escapee, Tabitha Savage, indicate a "mulatto boy" accompanied her and her group. Did he run barefoot through the marshes to get to his escape boat? Other stories of early settlements and childhood show how impoverished children were rounded up from the streets of London and sent to the Virginia Colony (McCartney, 2007). William Tucker, the first African to be born in America, is only known only by his name and the anomaly that his name is known at all. No names of specific Hispanic migrant children were found, and instead narratives of childhood are produced behind a shadow of nomadism.

Today, stories of children and childhood experience are emerging and are proliferating around the world. Research that seeks to engage children's stories, experiences, perspectives, and interpretations are making critical contributions to future histories. Importantly, research eliciting children's stories speaks to the multiplicities that occur in space, time, and place. Children of today, then, have the power to produce the lost voices of children like Thomas Savage, London street children, William Tucker, indigenous children, and migrant children.

Participatory Research with Children

Situated as a wide interdisciplinary field within the human and social sciences, the sociological study of children and childhood highlights how children are vital, competent social actors in their own right (Christensen & Prout, 2002; James, Jenks, & Prout, 1999). Where childhood was once considered a biological construction, it has become recognized as a social and spatial construction (Aries, 1962; Young & Barrett, 2001; Kraftl, 2015; Soja 1999). Contemporary views of the socially-spatially constructed child and childhood now offer the understanding that children are active, meaning-producing beings who have personal rights and

valid perspectives, and the experience of childhood is culturally diverse and widely determined by the society and place in which the individual child grows (Holloway & Valentine, 2000; Lefebvre, 1991; Soja, 1999; Young & Barrett, 2001;). The proliferation of these contemporary dialogues has led to a robust body of new and innovative research and participatory methods with children (Christensen & James, 2000; Christensen & Prout, 2002) and subfields such as Childhood Geographies, which further applies childhood perspectives to a more narrowed focus of the natural and built, cultured and political spaces, places and times of children's lives (Holloway & Valentine, 2000). These discourses of childhood provide alternatives to stories and statistics about children that define their experience in static terms. Furthermore, children's stories of childhood studies provide the alternative discourses that this dissertation seeks to contribute to; they are stories that speak of unique experience and perspective outside of labels such as rural, poor, affluent, urban, developmental. These stories turn those labels into *experiential, spatial, agentic, autonomous, valid.*

Thus, samples of research with children have been selected for discussion which provide models for the following: a) participatory methods and materials that actively engage youth's stories and perspectives; b) studies that specifically give insight into children's perspectives on experience in place and all that is embedded in place—spatiality, matter, culture, physical geography; and, this leads to seeking studies utilizing c) ethnographic approaches that aim to understand the deep nuances of a place and its people (children).

Participatory Methodologies and Materials

Methodologies and materials can take on many forms and quite often aim to understand children's experiences within space, time, and place, though this is often not explicitly stated. Materials and engaging methods create a bridge between researcher-adult and child, and must be selected based on age-appropriateness, ethical issues, and child interest (Einarsdottir, 2007; Fielding, 2001; Punch, 2002). Thus, adult researchers have the ability to co-create a culture of youth engagement and agency within any research setting (Fielding, 2001).

Griffin, Lahman, and Opitz's (2016) study transformed interviews into *walk-around* and *shoulder-to-shoulder* conversations. The materials that guided the conversations were books. The authors walked with students as they searched the library for books, or the researchers sat with students who held their selected books. Through the act of moving alongside the student or sitting on the floor as children do, the researchers attempted to take on the role of an equal and a listener, allowing the students to be the guide. Interviews were more like conversations led by the researcher's curiosity about the child's process in selecting books and reading. Furthermore, the books and the space of the library were intrinsic guides for both adults and children throughout the research process.

Indeed, materials and inquiry-based dialogues can facilitate participatory research between adults and children. Punch (2002) used "task-based methods" with rural Bolivian children which utilized a variety of materials such as drawings, mind-maps/diagrams, lists of activities, diaries, worksheets, and photographs along with ethnographic observation and interviews to elicit understanding about children's experiences living in their rural Bolivian communities. Similar to task-based methods, Montgomery (2014) used podcasting technologies and blogging that focused on critical democracy and "participatory culture" in an American third grade classroom. These children learned about marginalized groups in American history and made connections between American history, their personal histories, and their own present life experiences (p. 203). Once the children's podcasts were complete and recorded, they were posted on the school-wide website, allowing families to respond and support. Kia-Keating et al. (2017) also used social media such as Facebook and photographic visual methods for Hispanic youth's expression of their personal spatial perspectives on their place. However, these latter authors found when co-generating materials, images, and messages that can be available in a public way comes increased issues related to culture, boundaries, privacy, and the risk-benefit of participant vulnerability versus possible empowerment (Kia-Keating, Santacrose, & Liu, 2017).

Visual methods, particularly photography, have proven to be repeatedly successful with participatory research with children (Dockett & Perry, 2005; Dodman, 2003; Eckhoff, 2017; Oh, 2012; Punch, 2002). Punch (2002) found that offering children cameras to take photographs was a good alternative to drawing because photography could capture action that was difficult to draw. Eckhoff (2017) explored the role dynamic between the camera, the child, and the adultresearcher. Taking on what Mandell (1998) called "least-adult role", the author as researcher aimed to become responsive, interactive, and engaged with the children's activities of play and image-making (Eckhoff, 2017). The children took pictures of whatever they wanted, and with that open-endedness, they directed the study and illustrated what was important to their own lives in the context of their preschool life. Furthermore, Fargas-Malet et al. (2010) recommended using photovoice in conjunction with child-generated photography, which forgoes interviews, and instead, has children generate a brief statement about meanings behind their photographs. This method could clarify reasons behind photographic decisions made by children. For example, Dockett and Perry (2005) asked children to take photographs around their school, and a class book was made with the photographs and the children's comments. The project was meant to show future students what the place (their school) was like, and thus, deeply illustrated the children's places for learning. With a camera in a child's hand, so is the control over what

happens and what is captured. The tangible materials—the camera, the images, the written words, the ink, the paper—become synonymous with agency, experience, and autonomy.

Autonomy can come in extreme forms too. Through Young and Barrett's (2001) use of mapping, drawing, daily timelines, and photo diaries with Kampala street children, the authors offer an example of how the ultimate freedom and agency, and marginalizing confines, of homelessness, and the spaces where those affordances exist create a rich place for participatory research with children. What the authors found was the photo diaries produced the most insightful discussions, and it was the discussion that provided the deepest perspectives about the children's lives and experiences.

Spatial Stories and Experience

From these examples of participatory methods, contemporary technologies, and visual materials utilized to capture children's lived places, the question arises: *How did these methods and materials capture the interactions of the unique geography, history, and culture of that place? And how did those interactions influence and produce children's learning and experience?* While none of these studies explicitly addressed these questions of spatiality and materiality, the methods and materials produced data rich with inferences that can be made. Griffin et al. (2016) shoulder-to-shoulder conversations with children surrounding their school library practices revealed a significant awareness of space-time as shared by eight-year-old Andrew in his talk about reading a Hardy Boys book. Andrew realized that the book author was using a lot of words "we don't use anymore" (p. 20). The researcher and child went on to discuss the dates the Hardy Boys were written (the 1940s and 50s), the age of his mother, and how she understood the language better because she was a child in a different time. From this simple conversation about a book, it is evident that the boy is understanding how language changed over

time and the time-space of his mother's childhood was different than his present childhood. However, the author never discussed this revelation of spatiality.

Montgomery's (2014) work with podcasting illustrated the deep connections children made about history and change over time. For example, one student imaging that if she could go back in time and make slave owners listen to her podcast, she could change history. Althea stated in her podcast:

Yeah, our podcasts can help people. The slaves can listen to our podcast about Frederick Douglass and then they should ask their owners to read the Frederick Douglass book. If their slave owners read the book and heard our podcast they would say to their slaves,

"You all, you guys can all go free. You guys can get your freedom tomorrow!" (p. 212) Clearly, Althea felt that her knowledge, voice, and perspective could lead to great social transformation in history, and now. Althea's school as place thus became an open space and time.

Visual methods and Photovoice were used by Oh (2013) in Thailand to explore refugee children's experiences and give voice to their spatial perspectives. The research with the children elicited narratives that illustrated spatial and material experiences of "poverty, hunger, danger, pain and flight, while juxtaposing the present with the past, objects with emotions, space with time" (p. 287). The author posited that the children's stories contribute to understandings about how youth use their environments to make sense of their present and past experiences. One 10-year-old girl took a photograph of her sandals and described the meaning of them in relation to fleeing her school because of attack:

I ran back from school to the house without slippers. Because my mother couldn't buy me slippers. While I was running, my feet hurt a lot because I tripped, and stepped on tiny thorns and my feet were bleeding. When I got home my parents were ready waiting for me, to flee. My mother told me that we would flee into the jungle and stay in the caves. But now, I live here I don't have to run away and I get slippers because our dorm leader bought them for me. (p. 284)

Stories like this one describe what space, time and matter can produce: a place under attack; the meeting of thorns and flesh and the shed of blood; running away; and places of refuge. While this girl's history is not of America, it echoes the movement of African runaways on the Eastern Shore of Virginia. It tells the child's experience with her place of learning—school—meant to be a safe space for making meaning, and how it became a public sphere of danger that forced her away to learn about the world through direct contact with the physicality of nature and humans too.

Punch (2001, 2002) explored children's perceived spatialities in rural spaces, where childhood was shaped by rural lands, a more peaceful life, and a culture of farm work, somewhat similar to what a child might have experienced on the Eastern Shore in the past, and even on its farms of today. Punch explored space in several capacities including: a) what children liked and disliked doing in their communities; b) places where they went to and played in the community; and c) places they knew outside their community. In this rural setting for research, place was central to the research and understanding children's spatial practices for making meaning. Maria, 10 years old, described her typical day:

I got up at 5.30 in the morning and I went to get water from the river. Then I went to milk the goats. I brushed my hair and had my tea with bread. I changed my clothes and went to school. I read a book and afterwards we did language. We went out at breaktime and I played football with my friends. We came into the classroom 7 and did more language. I went home and my mum gave me lunch. I went to get water and helped my mum make the tea. Then I went to bring in my cows and when I got back my mum gave me supper and I went to sleep at 9 at night. (Punch, 2001, p. 7)

From this story of a day, Maria brings her home, her place, to vivid life. Her informal and formal learning spaces of working outdoors with the animals to learning language in school shape her experience, her understanding of time and the space of a day. The passage of time is shaped by her routine which is shaped by her culture, as the culture is shaped by land and agriculture there.

Dodman (2003), another scholar using photography and Photovoice with youth in Kingston, Jamaica, explored how youth perceived their urban environments. The children took scenic shots of the Caribbean Sea, gardens, homes, shorelines of litter, and streets of the city, and they created captions to illustrate their thinking and reasoning as to why particular settings were captured. One female captured a garden in her school's courtyard:

This Peace Garden shows peace in my school. Most people say my school is in a bad environment, but the peace garden shows that the school isn't that bad. It shows peace in the school, and tells us not to fight. (p. 299)

The influence of environment and youth's cognizance of that influence is evident with this example among others in Dodman's research. The peace garden is the actant; it is also a production of culture. It is a trajectory of multiplicities in a single garden alongside a single girl.

Not all participatory research with children leads to written, articulated stories of spatial experience. In particular, when visual methods and materials are used, the image has the power to solely produce children's perspective and experience. Eckhoff (2017) offered young children cameras who chose to produce countless images of their outdoor play and walks. Outdoor spaces, particularly the playground, granted greater freedoms for the children, and this speaks of

the innate desire for agency and autonomy at every age and the importance for unstructured learning spaces, which are afforded more outside the walls of educational buildings. For some, however, the outdoors represents the only environment children have, such as with Young and Barrett's (2001) street children of Uganda, who were given cameras which resulted in extensive documentation of their lived spaces and experiences. Images produced narratives of their storiesso-far of pick-pocketing on the streets, staying close together on sidewalks and sides of roads, and sleeping at the foot of a building, on concrete, near cardboard boxes at night. Intrinsically seen is how the geography, history, and culture of the place produced their living experience, shown through the children's imagery. However, those details of spatiality are left unknown.

Spaces that are open to and for children embody Massey's (2005) spatiality theory that *space is open*. And, for space to be open, the future shall be open. Can buildings be open then too? Through a lens of spatial justice and a framework of new materialism, spatiality, and children's geographies, Jones, Thiel, and colleagues (2016), described their work in creating the "Playhouse," a Reggio Emilia-inspired school with doors that were never locked—the doors leading to the outdoors and the doors leading to closets of materials. The Playhouse was open to the local community's children and families and children were free to access any materials they wanted at any time. What happened? The children were hesitant. They continued to ask before they touched the materials. Their internalization of "place" as Massey described—closed, conservative, territorialized and boundary-ed—ran deep. Rules were open too. Out on the playground, the authors renounced strict rules for safety and described how a boy leaped from the top of the slide, sailed to the ground, and powerfully landed on his feet. Thus, when place was made open by the omission of rules, like space, children were afforded freedom to *experience* and grow, change. The authors found:

We might have used our collective agency toward different ends, however, and aimed at producing an educational space that emphasizes rigidity, prescribed activities, and overwhelming adult intervention (which may produce more comfortable spatialities for adults who feel comfortable in institutions). Of course the children could also wield their agency within those conditions, but the space would inevitably be very different from what it is now. This brings us to the importance of childhood geographies, and specifically those geographers working in "activist" and "participatory" ways with and on behalf of young people (e.g., Aitken, 2001a, 2001b; Katz, 2004; Kraftl, 2015; Kraftl, Horton, & Tucker, 2012; Thomas, 2011). (p. 1153)

These insights attest to how child agency can produce new stories of spaces that are quite different from those prescribed and written by adults. The Playhouse of Jones et al.'s study is like Massey's (2005) open space and open future. Its doors remained unlocked; its playground had little rules; its materials were accessible at all times to all children. It became a place that was not closed, but wide open—for children and a community. Too, it became a place of rich learning and meaning making experiences.

Ethnographic Approaches

I now return to the walk around conversations, or the walking methodology, that were utilized as interviews with children discussed at the beginning of this section (Griffin et al., 2016); and by doing so, I can introduce a study that is closely tied to the quest for research that speaks of not just the power of cultural, community, educational and political spaces but natural spaces. I select this last study for its ethnographic approach, which is conducted through a postqualitative lens. Like Griffin et al. (2016), Rooney (2019) used walking methodology for ethnographic research with children, explicitly drawing from Tim Ingold's various writings on walking ethnographies, particularly, Ingold and Vergunst's (2008) work. Sarah Pink (2015) also discusses walking with others in sensory ethnography as a way to share "steps, style, and rhythm" (p. 111). Walking is an action that allows for attention to the "not yet' of what is to come" (Ingold, 2015, p. 136). Rooney's walking methodology reflects a growing interest in what Horton et al. (2014) referred to as "walking in the lives of children" (Rooney, 2019, p. 180), however, with Rooney's research, she produces how humans can "walk in the lives" of nature too.

Rooney's (2019) walks with young children focused on slowing down to take notice to the natural and elemental relationships of the world, which Rooney noted occur both regardless of and because of their presence, a true commentary of Massey's (2005) multiplicities of space and Barad's (2007) intra-actions, though the research does not make these connections. Slowing down offered Rooney and the children both chances to notice the past and future of the land, the animals and humans which can be seen through the present environment and all of its inhabitants. Time could differ. There could be forest time, wolf time, human time, clock time. Children described their experience with the natural world, as shown when a boy described fallen trees after a storm: "I remember I used to crawl along this" and "Now I can't climb on there anymore" (p. 186). Sometimes, there were no words to articulate their experiences within the spaces of their walks, as Rooney described:

A number of the children found different ways to feel the rainwater. One child reached out and ran her fingers along a cold steel rail to collect several drops before bringing them to her mouth to taste. Another turned his head to the sky, closed his eyes and poked out his tongue. He then wandered around for some time, collecting as many drops as he could in this way. When asked by the adults to describe what the rain tastes like – he seemed bemused. Perhaps he was intent on catching rain on his tongue for other reasons – to feel the coolness of the drops, to sense the weight or force of falling water....? Not all sensory experiences are easy to articulate. (Taylor and Rooney 2016; Rooney, p. 183)

Indeed, Rooney describes her research in a heading as "Walking with children: an ethnography for wild weather times" (p. 178). Is this an ethnography of children in space-time or is it an ethnography of climate and the natural world? Perhaps it is an ethnography to explore both, done through a participatory method with children. What could have been further discovered had the children taken photographs?

When considering ethnographic approaches that incorporate visual methods, Punch (1998, 2000; 2001a, 2001b, 2002) spent over two years in Bolivia developing rich accounts of children's experience in place by utilizing photography and other visual methods. The children of Churquiales, Bolivia, lived in a geographically isolated space and faced constraints of relative poverty and their physical isolation. Punch noted that, while she used traditional ethnographic data collection methods of observation and semi-structured interviews, she gained the richest data through the use of visual methods in conjunction with traditional approaches to ethnography. When children were engaged in a variety of ways that were appropriate to their age and communication abilities, their stories came to life and provided deep understandings about how their space and time, families and school structures, routines and cultures produced and shaped their life and meaning-making about the world around them.

Learning in Space, Time and Place: Purpose of the Study

When considering what is now known about engaging children in telling their stories through a variety of methods and materials, it leads one to ask: What images and words would William Tucker capture? How might Thomas Savage portray his exchange to live with the Powhatan tribe and his being sent to the Eastern Shore; and his counterpoint, the native boy he was exchanged for? Who were the London street children and how did they survive their trip across the Atlantic—how did they conceive of their ever-changing place? And importantly, how would Native American children represent their lived experiences and the brilliance of informal learning through oral traditions and being deeply rooted in natural space, time, and matter. While we will never know the perspectives of these children in history, we can aim to honor their stories by fostering the recounting of youth's histories and spatialities today, honoring the multiplicity of time-space trajectories.

Many of studies of children's stories reviewed existed in the backdrop of organized and formal learning spaces—preschools, public schools, or buildings for children and education, on educational grounds or educational fields trips. Some studies accessed youth in environments where informal learning continuously shapes their lived experiences. Some studies focused on the power of place, environment, space, and time, while other studies left space, time, and place as a static setting in the background. The agential power of matter was left nearly forgotten, reserved for two: Jones et al. (2016) and Rooney (2019).

The construction of meaning and of knowledge is, as many scholars attest, a spatialized process (Blundell, 2016; Foucault; 1986; Lefebvre, 1991; Massey, 2005; Soja, 1999); therefore history, culture, and *geography* cannot be separated from meaning and knowledge making. The influence of these ever-present big-picture trajectories must shape children's conceptions and perceptions about life. This set of gathered literature of childhood research, however, does not provide enough focus on the intimate and integral intra-actions amongst natural environments and, specifically, rural children's meaning-making, placing the physical geography at the forefront with space, time, and place. Research exploring the specific, agentic influence of space,

time, and natural matter on children's meaning-making processes is left in the shadow of human geographies and cultural-political spaces and times. Lastly, and specifically, what is unknown is how a coastal, isolated, richly historical rural environment produces particular spaces for learning, meaning-making, and future aspirations, while considering how past histories play a role. Research is needed that honors the diversity of American children's stories, their personal histories dating back decades, centuries, and their lived cultures. Research with children of the Virginia region, in particular, could echo the lost and still present stories of child-ancestors, of history, of time and space and matter.

CHAPTER 3

METHODOLOGY

Purpose of the Study

The purpose of this research was to understand how the history, culture, and physical geography of a rural, geographically isolated place, The Shore, interact, and how those interactions produce present day formal and informal learning as well as meaning-making spaces and experiences for children. Geography and children's spaces and places are often in dialogue with cultural and political spaces (Holloway & Valentine, 2000). As such, this research sought to focus on the natural and material of place, seeking to blur the boundaries between the humanness of social sciences and the physicality of the natural sciences—where the study of physical geography commonly lies. By placing the natural and the material at the forefront of the research, I could then explore the possible influences on past histories and today's culture of The Shore. Bringing the natural environment to the forefront and exploring its agentic and intraacting influences on learning and knowledge construction displayed how the social and natural, positivistic and post-qualitative, can be mutually supportive discourses that lead to deeper findings. Further, utilizing theories of spatiality and new materialism shaped new understandings.

Secondly, and equally important, was understanding the influences of history, culture, geography—time, space, and matter—through children's perspectives about place and lived environments. Traditional histories of The Shore, and the greater region, are speckled with stories of children, shadowed and static. Today, children's voices are becoming more prominent through the fields of childhood studies and geographies, children's literature, and participatory research with children. However, in the rural place of The Shore, children have had little

opportunity to tell their stories about living and growing up rural, no matter their background, race, or ethnicity. Instead, children are a part of a different body of discourses fraught with statistics and dialogues describing the challenges rural children face. The multiplicities of time and space allow for countless tails of trajectories, stories-so-far, all of which can contribute to more robust meanings of what it is to grow up in rural place, as told by children. Insights from youth can contribute to future curriculum design in both formal and informal learning spaces that heightens engagement, personal connection, and a sense of stewardship for one's own hometown and greater world through place based education (Sobel, 2004).

As such, the ultimate goal of this research was to illuminate the deep influence place created by space, time, and matter—has on humans, how we learn and make meaning, how perceptions about the world are shaped, and how we co-create our stories-so-far with the matter all around us. Through this development of environmental and natural influence, the agency in all things, spaces, and places was illustrated. Thus, the goal was that if these concepts were captured through children's imagery and text, the children and researcher would both develop deeper understandings, and the children could have the knowledge to go forth as young people who are engaged within their local contexts with a greater sense of personal agency and loving interest in a shared world (Sobel, 1996). The questions that guided this exploration were:

- In what ways are physical geography, history, and culture interacting on the Eastern Shore of Virginia? (e.g., isolated peninsula, rural, coastal plains, eroded barrier islands, colonization, slavery, segregation, farming and fishing, divide between classes)
- 2) How does this interaction produce both formal and informal learning, or meaningmaking, environments and experiences for children?

3) In what ways does engaging rural youth in participatory research using arts-based tools produce alternative discourses about living in rural places?

Rationale for Sensory Ethnography

This study blended ethnographic and visual-sensory methods with participatory research with children at a local library's photography program to explore and illustrate the unique qualities of and perspectives about The Shore's learning environments. Qualitative methods provided a centered perspective on the human experience and allowed for robust and rich narratives of humans' lives and the environmental context. Moreover, qualitative methods provided depth and conceptual understanding to the existing statistics that have been used to describe the rural experience, particularly the rural experience associated with the challenges of generational and economic effects of geographical isolation. Importantly, qualitative methods were conducted from both a post-qualitative and traditional perspective. In the following sections, I support the methodological approaches employed in this study. First, I begin with a rationale that juxtaposes traditional ethnography with the post-qualitative—a theoretical, diffractive approach to ethnographic data collection and analysis. Next, I explain the integration of participatory and sensory methods with children. Following, I describe and support the data collection methods I selected to use in this study, which leads to a detailed presentation of the study and context. In this description of the study, I explain how I utilized the methods selected. Importantly, I detail my process of analysis, which includes thinking with theory, thematic content analysis, and, finally, diffractive readings of children's final images with captions.

Post-Qualitative Ethnography

Lather (2013) described post-qualitative approaches as research that utilizes otherness, multidirectionality, networks, post-human bodies, and disparities (Koro-Ljungberg, 2016). This

means that data collection and analysis will be implicitly connected with the theories that frame this study (Jackson & Mazzei, 2015), and I began my data collection by placing myself, the participants, and every component of data across a flat ontological landscape (Gullion, 2018; Ingold, 2013). However, this stance did fluctuate with the findings.

It is important to note that the process of manipulating and integrating methodologies to go outside of the norm in a traditional sense can create uncertainty as to the direction the research may take, though outcomes can still be recognized and validated, thus synchronously "confirming and resisting normativity" (Koro-Ljungberg, 2016, p. 6). The post-qualitative approach to ethnography and participatory research with children was guided by the philosophy that order, linearity, and territorialization promote hierarchies and external control. Rather, "fluid and multifaceted" approaches better produce and accommodate the methodological multiplicities of this type of qualitative research (Koro-Ljungberg, 2016, p. 81; Mol, 2002). Sometimes planned methodological order can fail as scholars encounter the unpredictable and unexpected (Koro-Ljungberg, 2016). Many scholars have acknowledged the unexpected messiness of methodological linearity, and instead, consider the interdependence, iterative, and circularity of methodological design elements (Koro-Ljungberg, 2016; Lather, 2007; Luttrell, 2010; Marshall & Rossman, 2006). Allowing for messiness helped support the unexpected challenges that occurred throughout this research.

Specific to ethnography, when ethnography is approached from a post-qualitative perspective, traditional paradigms can be altered and transformed. Ethnographic research has seen many shifts in methodological approaches and theoretical underpinnings over hundreds of years. Having origins that date back to as early as Columbus and Eurocentric colonialism in the 15th- 17th centuries, original ethnographic methods reflected Western interest in understanding

other peoples and communities and in classifying humans around the globe (Hays & Singh, 2012; Vidich & Lyman, 2001). A focus on the "primitive" or "savage" of non-western places and cultures heavily influenced ethnographic discourses (Atkinson & Hammersley, 1994; Hays & Singh, 2012). Later, through the 19th century, philosophies of the purpose of ethnography became divided. Some researchers aimed to study and colonize who they considered primitive peoples, through the use of observation, the search for a single truth, and a Christian lens. Other researchers had an interest in liberating those colonized and attended to local context of those studied in order to understand findings. From the latter, the belief emerged that there is more than one truth, and this is based on context and perspective (Hays & Singh, 2012; Vidich & Lyman, 2001). In the early 20th century, anthropologists such as Boas, Malinowski, Mead, Radcliffe-Brown, Park, and Dewey further developed ethnographic methods, and adapted approaches in the United States (Atkinson & Hammersley, 1994; Bogdan & Bilken, 1992; Creswell & Poth, 2018).

Ethnographic approaches have now expanded to include many subtypes and defining features with varying theoretical orientations and goals beyond cultural anthropology, which include feminism, Marxism, critical theory, ethnomethodology, cultural studies, postmodernism (Atkinson & Hammersley, 1994; Creswell & Poth, 2018), ethnography in education and childhood studies (Heath, 1983; Nespor, 1997; Rooney, 2019), sensory ethnography (Pink, 2015) and diffractive ethnography (Gullion, 2018). Because of this branching and manifesting over time, pinning down a current definition of ethnography proves difficult. Pink (2015) defines ethnography as an iterative-inductive "process of creating and representing knowledge or ways of knowing that are based on ethnographers' own experiences and the ways these intersect with the persons, places, and things encountered during that process" (p. 35). Pink (2015), citing

Karen O'Reilly (2005), further suggests that defining ethnography by ethnographers' practices and methods helps capture what the research truly is: a research approach that draws on a variety of methods. Ethnography involves sustained and direct contact with "human agents within the context of daily lives," watching what happens, listening, asking, producing a "richly written account that respects the irreducibility of human experiences," and that illustrates the integral role of theory, the researcher, and the "views of humans as part object/part subject" (O'Reilly 2005 as cited in Pink, 2015, p. 5).

Still, these modern, defining features and definitions do not encompass all that ethnography can be. These definitions of ethnography fail to include—or at least articulate—the material and spatial forces at play with humans, and many scholars of ethnography and other qualitative methods have begun to place an inherent focus on non-human and non-living material, factoring all material as integral forces that shapes humans' lives, cultures, and spaces (Gullion, 2018; Ingold, 2013). As such, ever-transforming ethnographic methods manifest as a lack of conformity to a prescribed methodology, which allows for a plurality of approaches. As such, contemporary methods provide a platform for new research that challenges current boundaries of ethnography with the use of deeply engaging sensory activities with materials and researcher-participant collaboration.

Participant Engagement with Children in Ethnography

When participant engagement is underscored by strategic methods, voice and agency can be illuminated (Gullion, 2018). When conducting participatory research with children, in particular, ethical conundrums, power inequities, and communication abilities all play a role in the process, and researchers of/with children and childhood have real obstacles when working from the viewpoint that children are meaning-making, social actors, as they encounter similar problems as when working with othered, marginalized groups (Christensen & Prout, 2002; Punch, 2002). A main task with any of these groups, including children, is to work toward the right of all individuals to have a voice and to be heard (Christensen & Prout, 2002). This perspective is reflective of the contemporary children rights movement and the Convention on the Rights of the Child, created by the United Nations in 1989, which specifically states in article 12:

Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child. (United Nations Convention on the Rights of the Child, 2009)

Ethical practices with children are modelled through participatory research with appropriately planned methods and materials, all which challenge research and histories that objectify children and disregard fundamental rights.

As such, engaging children in hands-on, sensory methods provides avenues to illustrate children's stories in age-appropriate ways. When considering child agency, a recommendation by Einarsdottir (2007) notes the importance of using methods that fit the situation and children with whom the researcher is working. No single method works with every child or group of children, and this could be based on age, culture, communication abilities, or the physical space where the research takes place. When the right, most appropriate method is used for a particular group of participants, it has the possibility to illuminate a child's intrinsic agency. In contrast, when an inappropriate method is selected and children lack understanding of what to do, agency cannot emerge in that context. Knowledge of a variety of methods that can be selected for any given circumstance is essential, and this can promote a more equal power dynamic and maximize

the child's agentic experience (Einarsdottir, 2007). Methods that organically bridge children's stories and with adults' listening ears cultivate ethical, authentic participatory research with children. Furthermore, a researcher immersed in the field-setting of study, seeking the underlying historical, cultural, and geographical contexts and influences—as in ethnography—explicitly honors the personal and natural experience of a people and place.

Approaches to Data Collection

This ethnographic research conjoining sensory-visual methods and participatory research pulls from a variety of qualitative, ethnographic frameworks. Specific to the methods that were used in this study, each mode of data collection pulled from the sensory experience, whether that was visual, taste, touch, sound, and smell. In sensory ethnography the researcher and participants are immersed in their sense of place. As such, this qualitative research is called Sensory Ethnography (Pink, 2015). Sensory methods for data collection utilized photo-documentation and researcher immersion in the place with reflexive field notes, walking methodologies, participant observation and interviews, and the participatory method of Photovoice. The purpose of these selected sensory methods was to immerse the researcher in the environment and engage the researcher in organic participant observation and interview scenarios that provoked rich, deep narratives about The Shore. In addition, to support the historical component of this study, I collected artifacts and local documents of present and past histories of The Shore. Forthcoming, I provide further detail about each of the data collection approaches I used.

Reconceptualizing Interviews and Participant Observation

There are considerable similarities between the interview and participant observation in contemporary ethnographic practices and methodological discussions (Pink, 2015). In fact, as noted by O'Reilly (2005), there perhaps is not a clear distinction between the two at all, as,

simply, actions can be discussed as they occur, and thus simultaneously understood. Discussion can arise in many contexts which often can include performative participant observation—the fluid interactions the researcher has by working with participants. Thus, the interview and participant observation are not *apart* from each other, rather they are *part* of the same process (Skinner, 2012). Ingold (2013) noted that in ethnographic work, researchers study with people, hoping to learn from them; "what we might call 'research' or even 'fieldwork' is in truth a protracted masterclass in which the novice gradually learns to see things, and to hear and feel them too, in the ways his or her mentors do" (p.2). Interview and participant observation occurred as such, through interactions that took place during a co-taught photography lesson prior to the children's photo-shoot in the library of a Shore town. Interview and participant observation also took place while on the photo-shoot with children, walking and talking in the environment and taking digital photographs, and after, through the writing of captions for selected imagery. In addition, interview and participant observation was implemented through the researcher's fieldwork outside of the library photography program, through discussions with Shore people taking place both in person and virtually.

Walking Methodologies

Rooney's (2019) walking methodology for ethnographic research with children draws from Ingold's various writings on walking ethnographies, particularly, Ingold and Vergunst's (2008) work. Pink (2015) also discusses walking with others in sensory ethnography as a way to share "steps, style, and rhythm" (p. 111). Further, walking is an action that allows for attention to the "not yet of what is to come" (Ingold, 2015, p. 136). Rooney's walking methodology reflects a growing interest in what Horton, Christensen, Kraftl, and Hadfield-Hill (2014) referred to as "walking in the lives of children" (Rooney, 2019, p. 180). As noted in Chapter 2, Rooney's (2019) walks with young children focused on slowing down to take notice to the natural and elemental relationships of the world, which occur both regardless of and because of human presence. Slowing down offered chances for the children and researcher to notice the details of place, and to facilitate this "slowing down to notice place," children participants and researcher alike will be looking and selecting distinct spaces and times to be captured as imagery. When walking with children to take photographs during the photography program, the interview and participant observation were produced in a highly interactive way. Moreover, in this study, walking methodology occurred also without children, per se, as I walked many places of The Shore, photo-documenting explored areas. Additionally, I walked once with an accompaniment who provided a sense of protection in a remote wilderness and another human with which to share and reflect the experience.

Collaborative Projects with People and Sensory Materials

As walking is a way to gather data with children, working with materials and engaging in collaborative projects is another valuable ethnographic method that facilitates fluid interviews and participatory observation. When researchers and participants open up a collaborative space rich with sensory materials, it becomes a place for generous, open-ended inquiry about the realities of human life (Ingold, 2013). To physically join with others' perspectives about their lived experiences, in particular times and places, the researcher gains deeper understanding than if she had merely observed in a less participatory way (Ingold, 2013). Karen Barad (2007) stated: "We do not obtain knowledge by standing outside the world; we know because we are of the world. We are part of the world in its differential becoming" (p. 185). Ingold responded to this statement by positing, "...only because we are fellow travellers along with the beings and things that command our attention, can we observe them. There is no contradiction, then, between

participation and observation; rather, the one depends on the other" (p. 5). As such, ethnography became a bridge to collaboration with the local and materials in this research.

Pink (2015) supports the use of working with materials and making as a participatory method where the ethnographer participates in activities as a process of observation. This is a more intentional intervention on the part of the researcher (Pink, 2015) and can include collaborative work such as photography in a group setting. Pink broadly suggests reframing ethnography to become a participatory practice—from observation to intervention. In alignment with Pink, the field of childhood studies has models of this challenge to ethnography, called participatory ethnography (Cheney, 2011; Rodriguez et al., 2019) and "visual ethnography as a participatory method" (Barley & Russell, 2019; Oh, 2012).

The practice of Photovoice was a way to facilitate further interaction between myself, the researcher, participants, and visual materials and to evoke meaning behind the photographic decisions that children made. Variations of this method have been used by many childhood studies scholars (e.g., Baker, Panter-Brick, & Todd, 1996; Dodman, 2003; Fargas-Malet, et al., 2010; Lee & Abbott, 2009; Mitchell et al., 2007; Oh, 2012; Punch, 2002; Young & Barrett, 2001). Fargas-Malet et al. (2010) recommended using Photovoice with child-generated photography, which forgoes interviews, and instead, children write a brief statement about photographs' meanings or the photographic decisions behind it. Oh (2012) used Photovoice as a guide for their visual ethnography as a participatory method, which also intricately included fieldnote narratives. Oh (2012) found that participatory, visual methods contributed to understanding how children use their environments to make sense of their experiences, both past and present. Furthermore, when reflexively combining fieldnote data with visual methods, a

deeper, more contextualized understanding of the children's lives can emerge than if the researchers had used non-visual methods alone (Barley & Russell, 2019).

Photovoice employed through written captions in this study elicited meaning about photographs taken by participants. Photovoice was executed in this study by providing children access to their downloaded images, prompting the children to select a set of images as their favorites for inclusion in a community book, and having children type captions to accompany their selected images. The final artifact, the community book, was printed and given to each participating child and/or family (in the case of siblings).

Artifact and Document Analysis and Fieldnotes

Nordstrom's (2018) use of materials such as photos, artifacts, and documents in her postqualitative research mirrors traditional ethnographic data. Collection and analysis of artifacts and documents from the culture-sharing group have a long history of being an essential method to ethnographic work. The value of these materials also resonates in other post-qualitative approaches. Researching through new materialism, children's geographies, and spatiality, Jones et al. (2016), argued for spatial justice by looking at how scholars of education, and educators themselves, can support the community-based spatial practices of children. While Jones and colleagues' post-qualitative study was not specifically classified as ethnographic, it aimed to enter a place and culture-sharing group to understand community practices. A key data collection method was to collect documents and artifacts that detailed historical and present narratives and data of the surrounding city and region. From this collection, the authors richly illustrated the focal research setting through an introductory description, which allowed the researchers and readers to understand the foundational context of the research and, essentially, the place where the children were living. The practice of writing fieldnotes from observations is long-standing in ethnography (Walford, 2009). Fieldnotes were another form of data collection method employed by Jones et al. (2016), in the form of narrative writings and photo documentation detailing participant observation experiences, informal conversations, and group discussions. In conjunction with fieldnotes, photo documentation—thought of as a visual methodology (Rose, 2012)—offers a rich supplement, as it provides visual imagery that can offer more profound detail of an environment than just fieldnotes alone, as stated by Barley and Russell (2019). When considering reflexivity in writing, reflecting on, and analyzing fields notes through a post-qualitative lens, it is difficult, or arguably impossible (Gullion, 2017), to separate the fieldnote writer-researcher from the context, the participants, and the research. In line with diffractive ethnography (Gullion, 2017), and the concept of diffraction (Barad, 2007), the researcher is not separate from her tools and even observation can influence the outcomes of the research.

The Study: Research Design

Settings and Participants

There were several settings for this research. During ethnographic fieldwork, I visited several local places: a few towns, a couple seaside villages, country roads, and a remote barrier island. During these visits, I had varying length of stays. With each time and place visited, I conducted photo documentation, reflexive fieldnote writing, and I collected local artifacts as were available. I talked with locals in businesses, homeowners, a boat captain, and a museum docent who was heavily involved in some historical research through the museum. The docent was recruited for an interview. This phase of the research was supported by extensive document analysis of historical records and texts, local newspapers, and social media sites.

The setting for the participatory research took place at a local public library in one of The Shore's two counties, in one of the county's larger towns. Eighteen children with the age range

of six to 14 years old were recruited by the library's programs director to participate in an (approximately) six-week, once a week, photography and book-making program where the research took place. The photography program was co-created by the program director and myself as a means to provide children of The Shore opportunities to investigate their place using arts-based tools and to contribute stories about living on The Shore, from children's perspectives. I provided cameras stocked with SD cards for the program and the program director provided the meeting and book making place and computers. The program was planned to provide three on site photo shoots at children's chosen places on The Shore. The remaining meetings would consist of the facilitation of children's book making, where they would use the computers in the library to upload their images, select images, create captions and format these into a book using an online book making application. Of these 18 participants of the library program, 13 children agreed to participate in the study. This recruitment is characteristic of snowball sampling due to the wide range of connections the programs director had in the community (Hays & Singh, 2012).

While this explains the plan and program to which children were recruited and joined, the program had, in fact, only one meeting and photo shoot. Three days after the first meeting and photo shoot with children, Virginia schools began to shut down due to COVID-19. Many participants expressed a desire to wait to continue the program, which we decided was best. With the increased spread of COVID-19 over the coming months, the program was never able to resume. The data collected from the photography program is from the first, and only, formal meeting of the program.

Consent

Before the start of the photography program, I visited the research site to help introduce the details of the program with the program director and describe the purpose of the research. I brought examples of made books and children's photography for the children and parents to view so they could understand the nature of the project and visualize what the final artifacts could be. For those families who were interested in participating in the study, I provided parental permission forms (Appendix A) and child assent forms (Appendix B). A fundamental step of ethical research with children begins with gaining child assent to conduct research and discussing the proposed research in a manner that is understandable to the child so an informed decision about participation can be made (Young& Barrett, 2010). The museum docent asked to participate in an interview was additionally provided a consent form and a description of the study (Appendix C).

Implementation of Sensory Ethnography

In the following subsections, I cover the data collected through traditional and sensory methods.

Document and Artifact Collection

Prior to the formal start of the study at the library and throughout the study duration, I gathered and analyzed published narratives and documents that described the region's educational and learning spaces and structures, history, census data, and maps that show physical geography. Additionally, I transcribed a video-recorded keynote speech from the 2019 Kids Count Forum. Photo-documentation became a critical data collection method, as its sensory nature richly supported the documents, artifacts collected, and places traversed. I developed a shooting script (Appendix D) that aligned with and supported the study's first two research

questions and the guiding theories for this research (Rose, 2016; Suchar, 1997). I kept the shooting script on hand during fieldwork and acts of photo-documentation closely followed closely these guiding questions. Additionally, I created a fieldnotes observation protocol which is detailed in Appendix E. Photographs taken during fieldwork expeditions were compiled linearly in a Word document, as though what pictures I took first, then next, became a sequential narrative of events. I then wrote fieldnotes around the photographs I took, which described the explorations and the meanings behind my own photographic decisions. These fieldnotes of my fieldwork became the structure for Chapter 4.

Collaborative Projects with Children and Materials

The participatory portion of this study with children occurred through two meetings at the local library and surrounding vicinity. The first meeting was informational and to provide documents for consent to participate in the study. The second meeting was the first of the actual photography program and the first and only meeting where data collection occurred. The library's program director and I collaboratively planned a lesson to precede the children's first photo shoot on the day of the second meeting (Appendix F). Our plan consisted of teaching the program participants about the basics of taking photographs, which included a discussion about perspective and subject of an image, examples of photographs, a discussion about the purpose of my research and the role of a "researcher" and a "scientist," and finally, a tutorial for using their researcher-provided personal cameras (each camera and SD card within was initialed personally by each child). Within the context of this lesson, collaborative dialogues occurred where children asked questions and made comments and suggestions about the examples' subjects and perspectives. The children handled their cameras to practice using the material, asked more questions, and they shared suggestions with each other while playing with and learning how to

use the materials. The children also provided ideas related to possible subjects to photograph, where they wanted to walk for the day's photo shoot as well as the one planned for the following week. However, as noted at the beginning of the chapter, the program was ceased due to COVID-19 and social distancing measures.

Interview and Participant Observation

Data collection revolving around the photography program included the lesson taught and the children's acts of taking photographs while out walking. Reflecting Rooney's (2019) and Ingold's walking methodologies, many conversations evolved during the photography walk (Pyyry, 2014) and photo shoot. I used fieldnotes to record the free-flowing shared experiences of photography walk, and the conversations and observations I had and took. When it came time to select images and apply text, as in Photovoice techniques, I first created a digital folder for every individual participant and uploaded their set of images into their folder. I provided all parents and children with a set of photographs via email (or shared folder), as at this time, the library was closed. I invited all parents and children to help me compile a community book that would be a compilation of every child's selected few photographs. I asked the children, through their parents' email, to select about four images from the set and write a brief caption about their photo. I prompted them for their captions, stating that each caption could explain why that image is important to him or her and/or why it represents The Shore. From this communication, I received five responses which resulted in selected images and written captions that I compiled into a community book and made copies for each participant of the book-making portion of the program.

In summary, the data collected for this Sensory Ethnography included (a) local public documents, artifacts, and one video that provided a deep context to the place; (b) photo

documentation and fieldnotes about physical place; (c) interview with museum docent; (d) field notes taken from group discussion and photography walk; and (e) final images selected by children with accompanying text.

Data Analysis

Methodologies without methodology as supported by Koro-Ljunberg's (2016), Massumi (2002), and Mol & Law (1994), were utilized as a fluid, flexible framework that honored the study's guiding research questions, the stated significance of the study, and the key concepts put forth. The fluidity that Koro-Ljungberg suggests opened the reporting of findings up to both expansive narratives, written through theoretical analysis, and thematic content analysis. Narrative in the form of stories of place, The Shore, have been illuminated in this research. Chapter 4, which lays the broad context of The Shore's history, culture, geography, and learning structures, follows a post-qualitative format of theoretical analysis. In this analysis, specifically, Jackson and Mazzei's (2012) framework of *Thinking with Theory* guided the narration of my ethnographic data, situating the data deeply in the theoretical underpinnings of this study. Specifically, the data were analyzed through spatial and new materialist theories, with a critical focus on multiple trajectories and stories-so-far of all things, and the interrelatedness and intraaction among and between all matter and material, human and non-human (Barad, 2010; Massey, 2005). Barad's (2007) diffractive methodology, which places an inherent focus on the differences that emerge in the data and the becomings that result as a process of participation with the research, was a key focus during the analysis process, particularly in Chapter 5. To close, the children's final selected images with captions were analyzed through diffractive readings, focusing on the ethico-onto-epistemological matter (Barad, 2007) that concerned all relations—human and non-human—that become together on The Shore.

With all of this considered, there was an important place for recognizing the homogenous qualities that emerged from the results; patterns reflect homogeneity just as differences show heterogeneity, and both produce Massey's (2005) multiplicity of stories-so-far within space and time. Furthermore, as the analysis process began to unfold, there came a need for a methodological and logical way to organize both the volume of children's photographs and the lesson implemented prior to the photoshoot. Specifically, I needed a method to inspect the content of the children's photographs and the lesson to see if and how they answered my research questions. As such, in conjunction with theoretical analysis, I conducted a thematic content analysis specifically focused on the large data set of children's photographs and the photographs and discussions shared in the lesson prior to the photoshoot (Rose, 2012). This analysis is presented at the beginning of Chapter 5, which is a chapter that isolates the findings of the photography program held at the local library. In Chapter 5, I transition between these two, often confounding methodologies-traditional and post-qualitative-by honoring the findings of the content analysis and following, challenging those same findings through diffractive analysis. Furthermore, the final artifacts from the photography program (the images and captions selected and created for the community book) offer a closing platform of theoretical, diffractive reading which I then tie back and connected to the thematic content analysis findings.

Adult-Child Dynamic, Ethical Considerations, and Agency

In a making activity such as this one where there is technology, media, imaging, and writing there was a fluid responsiveness between adults and children. At times the adults took the lead, which manifested in the photography lesson and camera tutorial. Then, the children took the lead when deciding where they wanted to go on their photo shoot, where they physically walked during our photo shoot, how they manipulated their cameras, and which photos they

chose for the community book. In essence, once I, the adult, placed the camera (and the control) in children's hands, I stepped down as director and let them take the lead.

There were several points for consideration of ethical research with children. First, it was critical that the way I explained the project aligned with the (English) language abilities (and age) of my participants and their parents or guardians. To do so, I presented my research questions in child-friendly language. Secondly, when it came time to ask parents and children to select images and write captions, I sent one initial email and then one more follow-up email to those families who did not respond. After that, I did not pressure families with further communication. Importantly, all participants were given pseudonyms to protect anonymity.

Agency in this project came in the form of working with materials and the environment in a self-directed way that allowed children to explore their own place, experiences, perspective, and voice. The children decided where and what they wanted to photograph and if they wanted to participate in the book making. Furthermore, in the findings of this study detailed in Chapters 4 and 5, I focus on the agency of all things, acknowledging the power of the camera as a material tool, and the power environment has in shaping perspective and helping the child convey personal messages. The adult researcher, the program director, the parents who accompanied the photography walk, and children's peers were all materials in an environment, and they had the agency to influence and produce each child's photographic decisions, made images, and captions. This attention to ethics and theory speak to the larger discourse in the social study of children and childhood where children are already complete beings with their own perspectives about the spaces in which they live and learn.

Conclusion

The selection and development of these data collection methods and analyses supported the three research questions presented in this chapter. A Sensory Ethnography, analyzed from a post-qualitative perspective, affords the flexibility to use what could be considered an intervention, which is the collaborative making of photography with children, along with more traditional data collection and analysis techniques. The collection of local artifacts and documents, extensive photo documentation and field notes of the place, sensory methodologies and participatory methods all provided a set of data that offer deep insights. These insights revealed the influences of past and present, time and space, geography, and the community on children's meaning-making and learning. Furthermore, the methods utilized in this study illuminate how ethnographic approaches continually transform and change from their original Eurocentric purposes towards greater participation between researcher and participants.

The findings of this study are separated into two parts, two chapters. In Chapter 4, I analyze and narrate the data collected outside of the photography program: (a) local public documents, videos, and artifacts that provide a deep context to the place; (b) photo documentation and field notes about physical place; and (c) an interview. In Chapter 5, I focus solely on the data collected during the photography program, which includes: (a) the set of the images taken by 13 children; (b) lesson agenda and fieldnotes from group lesson and photography walk; and (c) the final selected images for a community book and accompanying captions.

CHAPTER 4

FINDINGS: PART 1

Chapter 4 lays context of the focal place of this study through the presentation of collected local artifacts and documents such as news articles, obituaries, court records, local agricultural and economic websites, public social media sites, and photo documentation and field notes of the places I traversed. I selected and collected these artifacts and documents with a purpose of attaining a broad context for the relationship between geography, history, and culture *and* education, learning, and childhood on the Shore.² Specifically, this chapter answers the first two questions of this study: (1) In what ways are physical geography, history, and culture interacting on the Eastern Shore of Virginia? (e.g., isolated peninsula, rural, coastal plains, eroded barrier islands, colonization, slavery, segregation, farming and fishing, divide between classes); and (2) How does this interaction produce both formal and informal learning, or meaning-making, environments and experiences for children?

I further support the context-laden narratives of the Shore's present and past histories and spaces by presenting the voices of two young adults who have distinct and close connections with the place under study. Theoretical concepts of space, time, and place are woven throughout this presentation of context as I move back and forth between present and past narratives of place, its matter, and how the people there learn, make meaning, and construct knowledge.

² It is important to note a nuanced shift in my written reference to what was previously "The Shore." What was brought to my attention as I began collecting and reading the variety of local documents and communicating with Shore stakeholders was that locals write "the Shore" and only capitalize the S. In this way, the first three chapters of this research presents the Shore as an unknown space to me as the researcher. The ethnographic fieldwork and research conducted for this study led me to know "the Shore" as a familiar place, shared with its local communities and people.

People of Tangier

"Like his father and generations of Tangier men before him, he will graduate to the sea" (Ritch, 2020). Matthew, the sole student of his class since fourth grade, graduated from Tangier Island's Combined School in June of 2020. The young graduate already has clear goals of working on the water alongside his father on his deadrise work boat, the Mary Ellen, and he hopes to turn that experience into a career as a tugboatman. Even before his graduation, Matthew had already acquired a Transportation Workers Identification Card and applied for credentials as a merchant mariner. He follows in the footsteps of a cousin and several friends who already work for tugboat firms. While having graduated with earned college credits from advanced placement class and having earned Virginia's advanced studies diploma, college is a "Plan B" for Matthew, stating that if he were to go to college, he would not know what path he would take (Ritch, 2020). To him, working on the water is a good career with the promise of good income (Ritch, 2020). As a recent high school graduate, Matthew earns \$110 per day on the shipboard production line, working for his father. His work consists of being the "culler," whose job is to separate the crabs by sex and size after they have been caught in crab pots by his father and brought on deck (Shinn, 2020). This wage, in fact, is much less than working as a deckhand on a tugboat, which can be about \$200 per day and includes health and retirement benefits, and senior ranks of tankerman and engineers can earn \$300 a day (Shinn, 2020).

Matthew is just beginning adult life, while others' lives on this small island have come to pass. Obituaries tell similar narratives. For people of the Bay, space and time form the arena of reality (Greene, 2004). On the Bay, water is time, constantly moving in currents, manifesting and feeding life, and taking matter across spaces to distant places. On the Shore, the sun is time, rising on the Seaside at the east, setting on the Bayside, at the west, creating its arc clock atop the heavens. The earth-fields fill the space with rows of crops rising up in summer and tendrils of roads winding into tall pines, leading to time—the water—beneath the stars, infinitely visible in a rural place.

Greene (2004) purported that "each of us carries our own clock," a personal monitor of time's passage (p.47). Each body's clock is precise, yet when bodies move relative to one another, they are not synchronized, and they measure elapsed time between distinct and remembered moments differently. Just as true for distance across space, each of us has our own internal meterstick (Greene, 2004). Yet, when we move relative to one another, our personal measures of distance can perceive distances differently between locations and events. Yet what has been shown by physicists like Einstein is that light is constant for all and when matter is in motion, time elapses more slowly for it (Greene, 2004). In this way, the ever-moving waters of the Bay seem timeless, unending. And while the stories of peoples' lives from birth to important events to death may be measured by dates agreed upon by most, the physical geography of the place, the body of earth, and the timelessness of the sunlight on water may measure things differently, just as they shaped who these people were.

Whid was born on Tangier Island in 1952. Most of his childhood was spent working on the water with his father and others in his family at Tangier. For his high school education, he attended a vocational-technical high school in Maryland, and later joined the United States Navy. He served in combat duty during the Vietnam War, and after an honorable discharge, he returned to work as a waterman on the island (Shore News Daily, 2020a).

In the late 1970s, Whid built a crab shedding operation. This became a full time operation harvesting and processing crabs, seafood, and oysters for over 25 years. Whid's crab shanty still stands in Tangier Creek. Many locals, visitors, and waterman would frequent the Crab Shack to

converse, discuss the water business, play music, and "solve the world's problems" (Shore News Daily, 2020a). Whid was an avid musician and played in a local band with his brother. Whid always welcomed opportunities to share his knowledge of the water, or anything else, with others, especially the next generation who were just learning the business. The Crab Shack has been a special place in the community for 45 years. When Whid retired from the water, he turned his skills into carpentry and handyman work. One of his special talents was called "ruggin," which is the replacement of carpets ruined by high tides (Shore News Daily, 2020a). Whid passed away in July 2020. It was his wish to be cremated and have his ashes spread upon the "waters of his beloved and beautiful Chesapeake Bay" (Shore News Daily, 2020a).

Wanda was another resident of Tangier, born there in 1933. She owned and operated Wanda's Gift Shop on Tangier, which she started in the early 1980's on her front porch. He business was successful and it "flourished into a labor of love that she poured her heart into for over 30 years" (Shore News Daily, 2020b). Wanda was a faithful Christian of a local church on the island. She played the piano for many years there and supported several Pro-Life Missions. In the winter months, she spent time working with her hands- crocheting and crafting. She did travel beyond the water of the Bay, with her children, to the Holy Land—a destination of Christian pilgrimage between the Jordan River and Mediterranean Sea—among other places. She cherished her time with family and friends. All of her children have remained in some locality on the Shore (Shore News Daily, 2020b). Wanda left this world "to be with the Lord" in July 2020. Her memorial was held at the church where she spent much of her time and faith on Tangier (Shore News Daily, 2020b).

Both Whid and Wanda passed in the same month of the same year. Both their bodies told it so and their families documented it so. They lived lives that could be considered a cumulation of events across and within time and space, moving at differing paces, different trajectories, yet both entangled in and shaped by the same place. The crab shanty; the porch store; gathering places on the Shore where the air and water and land all set the scene for life. This is a localizing of space to become a personal place. This is a distinction of separation of the local from the space "out there," and these modes of thought set out to tame "the challenge that the inherent spatiality of the world presents" (Massey, 2005, p. 7). Massey posited that humans develop modes of thought to cope with enormous reality that space challenges us to conceive. Rural places like the Shore provide a contrast to globalization, as places like the Shore seem to exist in a past time that is not keeping up other trajectories. This conceptualization of this static-like space reduces it to a dimension that is merely a progression of events in time. "The trajectories of others can be immobilized while we proceed our own; the real challenge of the contemporaneity of others can be deflected by their relegation to a past (old-fashioned, archaic)" (Massey, 2005, p. 8). Immobilization can come in the form of deficit perspectives, yet these are stories of strength, hard work, community, and a love of place. Indeed, the Shore has its own inner clock and meterstick to measure, and the place does seem to reflect a slowing down of time. Perhaps this is because of the constant movement of water that surrounds this place, as Einstein showed, when matter is in motion time elapses more slowly for it (Greene, 2004).

The Merging of Geography, History, and Culture on the Shore

Tangier is a small island on the Bayside of the Shore, and it is but one space and time where the geography, history, and culture of the Shore interacts and produces place and its people. The Shore's extensive marshes, productive waters, and fertile soils have provided a rich agricultural economy and seafood industry that have supported its local inhabitants and beyond since the beginning of human occupation. Northampton County alone has 142 farms, 48,279 acres of farmland, and second in the state for agriculture. Fishing, crabbing and clam aquaculture, and salt production are a vital backbone of the Shore's economy (County of Northampton, Virginia, 2019).

Business abounds that illuminates the capitalization of the region's resources, and upcoming generations are being cultured to capitalize on and work upon this rich geography, as they have for centuries. However, some children of the past were not always treated as well as Matthew of Tangier, nor were they given the same opportunities for learning and apprenticeship as Whid offered to those who were just beginning to learn the work of the Bay. Northampton County has America's oldest continuous court records, and those records report a different narrative about children and work. In one of the oldest records, from 1632, the case was reported of Jane Winlee's suit against [James] Knott (Johnson, Latimer, & Mihalyka, 2007) for:

the misusage of her son, Pharaoh, an apprentice to James Knott. After examination Knott was found delinquent and was ordered to remedy the situation and pay Court costs. If complaints of mistreatment are ever brought to the attention of the Court again, the indenture between Knott and Pharaoh will be void and Pharaoh returned to his mother. (p.13)

No other information was found about Jane Winlee's son, Pharaoh, and like many other stories and structures yet to be presented here, he is a child whose perspective is lost in time. In his most recent book *Until the End of Time*, Brian Greene (2020) spoke of consciousness and the importance of the first-person story:

A story that encompasses consciousness is different. A story that penetrates into the inner sensations of sight or sound, of elation or grief, of comfort or pain, of ease or anxiety, is a

story that relies on a first-person account. It is a story informed by an inner voice of

awareness speaking from a personal script each one of us seemingly authors. (p. 188) Pharaoh's first-person account of his experience with Mr. Knott would create a broader consciousness of that time and place. As such, matter alone—a court record—cannot produce the full sensory experience needed for a full understanding of Pharaoh's story. We, too, need Pharaoh's first person account to understand the personal influence of geography, history, and culture on Pharaoh's learning and made meaning about the place in which he lived.

Sensory Experiences with Place

Some matter alone does, indeed, provide a full sensory experience needed for conscious moments: visual imagery, food, the sounds of moving water, the heat of the sun and sting of a bite, the pungent, muddy smell of a grassy marsh in summer. The upcoming sections depict the photo documentation collected as I traversed localities on the Shore. Sensory Ethnography encompasses the activation of the senses to learn about a place. The digital images taken are accounts of my own place based, ethnographic learning experiences on the Shore. From here, the Shore became a tangible "place" for me, a "sphere of the everyday, of real and valued practices, the geographical source of meaning..." (Massey, 2005, p. 5). It became personal and known and I meandered back and forth between objectivity and subjectivity as my own senses were activated, deepening my understanding of the interactions of physical geography, history, and culture and their influences on childhood learning.

The Sound of Water at a Seaside Village

A historic seaside village was a destination point to take a boat charter to a deserted barrier island on the Seaside of the Shore. This particular field work exhibition included an accompaniment. We arrived at our Vacation Rental by Owner (VRBO) property at the village, the Wharf, which was in a walkable, tiny seaside town of just a few neighborhood streets. The main street along the Wharf was the place of an aqua farm. The aqua farm grows and harvests shellfish and contributes to the Shore being one of the highest producers of shellfish in the United States. Specifically, the Shore has a \$28 million market of aqua farming and is the largest clam producer in United States. Virginia is first in the U.S. for eastern oyster production (Northampton County, Virginia, 2019b).

Along the Wharf, long rectangular containers covered with green tarp line the space. A constant hum of the moving water fills the air. Water exits the rectangular bins from between them and from the ends of them. The water is tunneled through troughs and back into the bay formed by protective barrier islands. Water is pulled into the bins from the bay also, as shellfish need flowing water to thrive. Figures 4-6 provide visuals of the aqua farm and neighborhood setting. The first residence on the right in Figure 10 was a very active home. Men and women came and went frequently from this home on foot (to the aqua farm area) and in vehicles.



Figure 4. View of aqua farm and nearby homes of the Wharf neighborhood.



Figures 5 and 6. The constant motion of water is necessary for the health of the shellfish. Just down the road towards the village marina, and still part of the aqua farm, flags blow in the wind. The flag displays a set of political beliefs indicated by flying the Trump 2020 flag (Figure 7).



Figure 7. Flags in the wind at the aqua farm work area.

On a nearby bridge, two Hispanic young men were sitting at sunset when my accompaniment and I set out for a kayak ride (Figure 8). They sat for a long time, at least an hour, having been there before we arrived and still there when we returned. No phones were in their hands. They were simply sitting on the rail and looking out towards the sky, west toward the sunset. They smiled at me and my accompaniment several times, just down the street from the Trump 2020 flag.



Figure 8. The bridge over a small inlet that leads to the village marina or aqua farm. The juxtaposition of the two scenes: Hispanic, possibly migrant workers on the aqua farm, resting on the bridge and just down the road, the Trump 2020 flag blowing in the wind. As of August 18, 2020, Trump's border wall construction had reached nearly 300 miles, for the purpose of keeping immigrants, those stated as violent and those seeking a safe haven, out of United State soil and political boundary lines (Whitehouse.gov, 2020). Trump's physical construction of a border wall creates a material boundary with an illusion of safety. It is an attempt to control space through territorialization of place, with select points of entry and payment (Whitehouse.gov, 2020). Yet, space can never be fully safe to living bodies, and Massey (2005) argued that, importantly, places are not closed or bounded. Politically, this lays the ground for the challenging of exclusivity. Secondly, places cannot be given, despite how, politically, we grant permission to place through legal citizenship and social acceptance. Further, places are ever-forming and changing through events and processes. Lastly, the identity of a

place can and will always be contested through localized struggles for hegemony (Massey, 2005).

Hispanic immigrants often come to the Shore as agricultural workers (Steger, 2019). Pedro and his wife Loida migrated to the Shore from Guatemala and Mexico to work on area farms picking chili peppers, cucumbers, tomatoes, and sweet potatoes. Typically, farmworkers are paid by the bucket they fill, known as a "piece rate." For example, farmworkers will use a 5 gallon bucket to fill 32 pounds of tomatoes (Presbytery of Eastern Virginia, 2020a). The farmworker will fill the bucket, hoist it upon his or her shoulder, and then carry it down the long row of crops to take it to another worker who is waiting by a truck. That worker then dumps the fruit or vegetable in a bin. The farm worker then returns to the field with the now empty bucket to repeat across 12-hour days, six days a week during harvesting season. This work results in about 125 buckets a day, which earns about \$50 (Presbytery of Eastern Virginia, 2020a). In addition to the danger of hard, physical labor in high heat, farmworkers are often exposed to high levels of pesticides (Presbytery of Eastern Virginia, 2020b). Pesticide sprays may go off while workers are in the fields, and workers may also be pushed to prematurely re-enter the fields after crops have been sprayed. These both result in unsafe exposure. Even indirect exposure such as skin contact from pesticide residue on clothing or breathing "pesticide drift," which is when the wind carries chemicals from the crops to housing areas can cause health hazards (Presbytery of Eastern Virginia, 2020b). Pedro, in an interview, explained that he now works in the poultry industry making \$12 an hour stacking heavy boxes (Steger, 2019). He said that there is nothing in Mexico for his family of six, a wife and four children. His wife, Loida, agrees and said in an interview that many come to flee starvation and to help their families just like her family did (Steger, 2019). There are many local organizations that work to assist migrant farmworkers and

their families. Specifically, local churches partner with two Migrant Head Starts in different localities, and they aim to disseminate the reality of the working conditions to their congregations and local community to solicit community help.

Some Latino people of the Shore have found upward mobility from picking crops through education. Jose Garcia immigrated from his family's farm in El Salvador and worked for a local chemical company (Steger, 2019). While working on the Shore, he became associated with the Virginia Tech Agricultural Research and Extension Center (VTAREC). Already having attained an undergraduate degree, he was encouraged by the Center to pursue a graduate degree at Virginia Tech, which he did successfully. He has returned to VTAREC on the Shore after earning his masters, now as a Ph.D. student in plant pathology (Steger, 2019). Narratives like Jose Garcia's counter the dominant narrative of the harsh reality of migrant farmworker life, however, the typical narrative of the migrant farmworker and their children's environmental conditions is an area that needs to be critically addressed. The rural Shore beckons people worldwide, in particular, farm-working immigrants specifically because of its physical geography. From this, the culture of place shifts over time to represent the humans that live there. It was the Shore's geography and economies that led Garcia to the Shore, and later, the university and a higher degree in a formal educational setting. The meager opportunities of the Shore led Pedro and Loida to start a new life there, it being far better in comparison to life in other places and providing the possibility of educational opportunity.

The Entangled Past and Restoration

Across the street from the aquafarm is an old, closed-up building that looks like a oncebeautiful Victorian home. It served as multi-purpose community hub since the mid-1800s, as described on the historic plaque near the side door. Over time, the building was added to and came to include a meeting hall/theater and a post office. It was known as Johnson's Store to local residents. At the beginning of the Civil War, Confederate soldiers were recruited at this site. Later, during the Union occupation, Yankee soldiers searched the area for supplies being smuggled to the South by local blockade runners. It was also a place where patrons of the store formulated plans for resorts on the Barrier Islands, such as the prestigious Broadwater Club on Hog Island. In fact, President Grover Cleveland departed for his vacations at the Broadwater Club from the Wharf waterfront. By the 1980s, the store was converted into a restaurant. More recently, it was closed due to poor management, as noted in the guest book of the home where I stayed. The guest book also asked, "Would you like to buy the restaurant?" Restoration and attempts at revitalization of lost structures and community places are key acts on the Shore as shown repeatedly in the various places I visited.

Saving structures from weather and time can be seen in other places in this little village. In fact, the homes and residents of this village have a unique story that, in fact, could argue against a statement Massey (2013) once said about time. Massey stated, "I don't think of time as being material, time is ethereal and virtual and without materiality" (Massey, 2013). In this case of the Wharf colony, time became entangled with materiality through climate change and the shifting of sand. The house sign in Figure 9 gives a clue to the materiality of time and its effect on historical narratives.

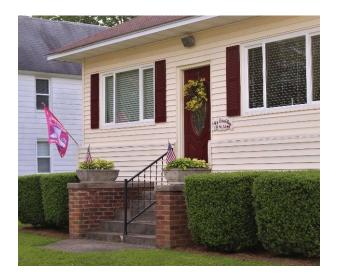


Figure 9. Hog Island Home, Est. 1928.

Barrier islands run north and south along the Atlantic coast of the Shore and contribute to the Shore's unique history. The Wharf is a settlement of Hog Island, which is one of the most famous barrier islands of the Shore. From the Wharf, it is an approximate 45-minute boat ride through Hog Bay to get there. Hog Island is now uninhabited due to storms, erosion, and also the availability of boat motors, which could allow watermen to live better on the mainland and easily commute to the island to work at the shellfish beds. After one great storm in the early 1930s, Hog Islanders moved to the Wharf. People's homes were brought to the mainland on barges and rolled back onto the land on telephone poles. This home in Figure 16 shows the sign "Hog Island House, (address), Est 1928"—a relic of Hog Island history.

In a news article (Tennant, 2011) that detailed some interviews with past residents, Yvonne Widgeon, born on Hog Island, moved to the mainland at the age of two. Every Saturday night throughout her childhood her family would gather and tell stories about the island life that they left behind. Narratives of the lost island became informal historical teachings for gathered ancestors of Hog islanders. In later years, Yvonne brought to life these histories by writing them down as poetry, and she shared her written stories at Hog Island reunions, which she began in 1989. One poem begins: "Our hearts today are longing to be/ back in a paradise of sand and sea/ a place called Hog Island, where memories alone/ can carry us back to our island home" (Tennant, 2011). There are few people who remember childhood there, but the passing of stories allows life there to live on.

Another interviewed for the news article explained that she was five years old when her family left, but she still remembered her mother's comments about the exterior of their home being black with massive mosquitoes (Tennant, 2011). A Civil War soldier wrote in 1864: "The Mosquetoes of this Island are most horrid looking 'animals' - they can hardly be termed 'insects' on account of their size and ferocity" (Tennant, 2011).

Language, histories, and teachings about Hog Island are well-determined by its environment. The stories passed down may twist and manifest from memory and imagination, exaggeration and fact. In Greene's (2020) most recent analysis of time and the human search for meaning, he delved deeply into the origins and human need for language as a path to articulating, understanding, and teaching experience. He noted that with language, we can conjure imagery. We can pass on knowledge, hard-earned, which substitutes "the ease of instruction for the difficulty of discovery" (p. 257). Language allows humans to share plans and align intentions, which leads to coordinated action and communal force. With language we continuously tell and retell collective narratives that make sense of experience (Greene, 2020), making matter and environment discursive. Karen Barad (2007) has developed unique nuances of language that allow for rich understandings of the interaction between environment, experience and engagement with it, and how we, as humans, narrate all of it. Through the concept of agential realism, the interactions that are every-occurring between all matter are brought to light, simultaneously with the discursive-the way the human makes meaning of matter, space and time (Barad, 2007). Hog Island narratives shared over time detail the magic and harshness of

living on a strip of sand upon the Atlantic. These are stories of storms and tides (due to climate and proximity to ocean, equator, and poles), ravenous insects, and a close-knit community. These are narratives of a shifting, changing, and moving earth due to the sheer power of elemental forces. These elemental forces all interacted with humans, from whom the stories came to describe it. With or without humans, Hog Island's existence is real, a barrier island before settlement and a barrier island still, now people-less.

Hog Island is now owned by the Virginia Coast Reserve. Geologically, this body of earth is constantly undergoing rotational instability, meaning that the remote barrier island changes shape frequently as it erodes in some areas and accumulates sand in others. Today, what was once Main Street on the island is now submerged in water, and the only thing left of this specific traversed road is the narratives (Tennant, 2011), which live on and teach the next generation of the past and the intrinsic nature of time and space.

Learning in Place, Space, and Time

Up to this point in the findings, I have presented the Shore in the broad context of geographic place. In doing so, I have presented elements of the most important economies that exhibit the liveliness of material and human life. I have narrated slices of history and people present and now past that reflect specific types of interaction with environment. A distinct culture has emerged, which can be seen and felt and tasted. I have introduced these details of context through artifacts and documents found and sensory ethnographic data collected.

But where are the children today? Perhaps you have made inferences about childhood thus far based on the laid context of the Shore. Perhaps through these stories you can imagine a childhood living by the salty water, fed a diet of oysters, crab, and fried chicken; ingesting a visual diet of corn fields and the ever-flowing currents that surround; absorbing a sense of the material world that fills the senses with that of a specific place. The next section explicitly dives into the most salient aspect of this research: childhood and learning specific to place—and space and time. The forthcoming sections will be organized by the continuum of learning spaces and places found on the Shore, from spaces of informal learning to formal learning structures. The first childlike learning presented is my own, as I move from the subjective outward, at best.

Informal Learning on the Shore

Informal learning opportunities and spaces abound on the Shore. Informal learning environments are characterized by the lack of physical structure to house and contain learners in in a territorialized place. They can be impromptu for play and exploration, completely directed by the individual's choices and desires.

Ecotours

On the roads of seaside villages run by an aquaculture, the business of ecotours abounds. Boating tours and deep sea fishing attract visitors and residents alike. Ecotours are undoubtedly informal learning experiences, and they account for my own learning experience called field work research and an excuse to explore the mysterious Hog Island myself, with my accompaniment. Figure 10 shows the researcher at the bow of the small charter boat, early in the morning, heading across Hog Bay to the remote Hog Island.



Figure 10. Research expedition to Hog Island.

We head east, towards the rising sun, and the notion of objectivity in research (Barad, 2007) fades as I am a child again embarking on an unknown experience, going to a completely unknown space. Figure 11 shows the path we took from the village marina to our drop off point on the island. Once arrived at our drop off, the Captain instructed us to exit the boat into the warm, shallow waters at the inside of the southern tip of the island. We were still inside the bay, on the west side of the island, and had to traverse around the southern tip to the east to find the Atlantic.

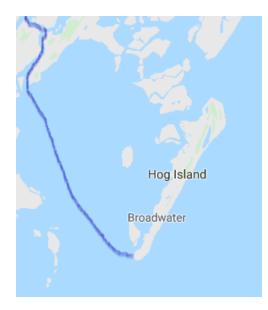


Figure 11. Water path to Hog Island.

As we began our walk towards the Atlantic, my accompaniment and I, the wind blew at us with a pleasant strength, thus making it unknown the ferocity of the green heads (biting flies). We drifted on foot in awe and reverie along the shore of the barrier island at low tide. We waded out into calm, silky waters, my accompaniment ahead and I, falling behind, taking photographs. Spectacular. Breathtaking. We rounded the southern tip and reached the Atlantic Ocean to view an untouched beach, people-less for miles, looking north (Figure 12). Accompanied field work, shown in Figure 13, provided a greater feeling of safety and also shared experience to reflect upon and remember continuously. Accompanied fieldwork also shapes the experience with the environment because each body experiences environment differently based on their individual senses (Suchet-Pearson, Wright, Lloyd, Burarrwanga, Hodge, 2013). What I expected would be deep, philosophical reflections shared between two people about the nature of time and space soon turned into a discourse that took on the theme of *Man Against Nature*. Agential realism wrote our script, where the material of environment fiercely shaped and produced our knowledge construction and this tale of a trek upon a deserted island.



Figure 12. Untouched beach of the Atlantic Ocean, Hog Island.



Figure 13. Accompanied field work.

No signs of human life were on Hog Island except for an old hunters' lodge far in the distance, a lookout tower also in the distance, and this found blue balloon in Figure 14. This could be a lone representation of Hog Island childhoods lost in time and space in the deserted place. This is just one example to come of the lost learning places and spaces of the Shore.



Figure 14. Lost balloon on the deserted Hog Island.

Once we turned back to look for a place to eat, we began walking with the wind. No longer did the wind quickly and briskly blow our scent behind us. Instead, it followed us, walked with us, as we headed back southwest. Hundreds of greenheads surrounded us, landing on our hats and shirts, legs, and backpacks. Welts billowed up on my accompaniment's calves-the places he could not swipe fast enough. We sprayed bug repellant on their little black-green bodies from a millimeter's distance. The insects did not surrender. Female flies need blood as fuel to lay their eggs, and they are attracted to black and patterns, assuming these colors are animals. Hundreds of flies landed on our bags attempting to feast on the printed fabric. We threw our bags up into the dunes and went running to the sea, wading in until the water was up to our chins. Our black hats became covered—both a perceived feast and resting place for the insects while we waited out the remaining two hours till Captain came back to retrieve us. The conversations became all about the flies, specifically it was a conversation of numbers: estimations of the number of flies my accompaniment viewed atop my ballcap; estimations of the number of flies I viewed upon his; estimations of the number of flies covering my backpack. Screams, *Ahh!* when a calf was, again, bitten. The question, *What time is it?* Time. How much time was left? Two hours. One hour. Our sense of time differed or united by flies? Counting time down to an endpoint, a marked point in space where our rescue would occur. We looked into the distance for the possibility of a coming vessel. *How far away do you think that is? Is that him?* It's getting closer! Our sense of measurement, of distance shifted as our different states of desperation shifted by the ebb and flow of bites that came and went. The flies and the wind constructed new meanings of this place, a narrative of counting and time and distance, mathematics became our language (Greene 2020), and a means to mentally survive this moment with place.

Chilled by wading chin deep in water, we finally ran ashore. I, running as fast as I could to make my own wind, trying to find a place near our extraction point where the flies did not find us, where the wind blew at just the right angle on my body: figuring the wind direction, *southwest*. We waited and watched into the blue for our rescue off this Godforsaken island, whose remaining dominant population were some blood thirsty insects. As time ticked to 1 p.m., we were picked up and brought back to the mainland the same way we came. I returned to the bow, looking ahead, the curiosity of an adventurous child still within, the desire to learn more about place still pulsing through me.

Village Neighborhoods

Back in the seaside village where we embarked on the ecotour, there are, indeed, signs of children and childhood and informal learning spaces everywhere. No one drives fast on the residential roads. Swings hang from trees and playsets are in yards whether that yard frames a pristine home on the water or a trailer. Figures 15-18 show examples of these descriptions.



Figure 15. Residents drive slowly along the narrow neighborhood streets.

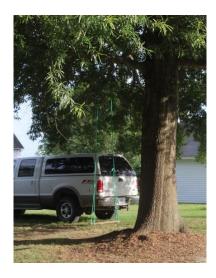


Figure 16. Swings hang from trees.



Figures 17 and 18. Playsets are visible in many backyards.

The first house here, Figure 24, shows a playset in better condition than the trailer home on the property. Other play equipment was not in as good a shape as the playsets, like the trampoline in Figure 19. Just as childhood itself, childhood things are left to time.



Figure 19. A dilapidated trampoline with a view.

The yard and house directly across the street from the trampoline look like the most worn house in the village. Fencing shaped a small square around the whole front of the house where two dogs barked. Other toys and bikes for young children were all over the yard. A big truck with a tractor-type work machine on a trailer was parked right next to this child's vehicle in Figure 20. A silhouette of a little girl could be seen clearly through the window.



Figure 20. Child's truck among many other toys in the yard.

On a short road nearby were about six houses. In Figure 21, the house to the right of the blue object was decorated with crab sculptures and potted plants. Plastic children's vehicles—

scooters, bikes, and trucks—were all over the yard. The family car had a Bernie Sanders sticker and a *COEXIST* sticker.



Figure 21. Family house with evidence of childhood.

To the left, or directly across the street from this home, was a little black goat with a rope around his neck, tied to a thin, high tree branch that gave him some flexibility to move around. The family pet moved into the foliage when I tried to capture him, as shown in Figure 22.



Figure 22. Goat in the foliage, tied to a tree across from the family house.

As shown through the images, the Shore families aim to provide for their children in by the giving of things.

Childhood Objects

Childhood objects for play and care can be found on the streets of small towns and even in the earliest court records of the Shore. Childhood things mirror what is important to the parents and community and what they believe children need to grow up. This little shop in Figure 23 sits at the intersection on a Main Street in another small town. Every day, these second-hand items sit out front in a colorful display. Much of these items appear to be items for children: little toy vehicles, picture bookshelves, children's furniture. The building appears to be a tiny place of worship too. The black and white sign indicates a pastor's name and *All are welcome*.



Figure 23. Little shop on Main Street selling second-hand items.

Child I Now Go With. The phrase "child I now go with" refers to an unborn child. The term can typically be found in male wills as fathers, and sometimes mothers too, plan to provide for their unborn child. In this will from the county's historic court records (Johnson, Latimer, &

Mihalyka, 2007), Rebecca Fisher is preparing for her unborn child's future as she prepares for her own death:

REBECCA FISHER: 3 JUNE 1658/28 JUNE 1658-

To the child I now go with 10 cows and 4 heifers. To my beloved sister Mary Hanby 2 cows and to her daughter 2 heifers. To my well beloved Brothers Thomas Stratton, John Bagwell and Thomas Bagwell. To my brother Phillip one feather bed. To my brother Stratton's son Benjamin. To Tobias Selve my god daughter one cow calf. To Hannah Wheeler a cow calf. If child I go with should die then child's estate to be eq. div. by my own three brothers, sister Hanby and my brother Phillip Fisher. Brothers Thomas Stratton and Phillip Fisher overseers. Witt: Elizabeth Selve, Agnes Stratton (p.11)

Historically and today, as can be seen by the items willed to beneficiaries, the toys in the yards, the goat tied to a tree, and the second-hand shops selling accessible childhood items, Shore families make it paramount to give their children all they can, and what is given reflects the geography and culture of the place. Jane Bennett (2010) presents the agentic quality of things through *thing-power*. That agency illuminates the childhood quality of the world, as it is filled with all kinds of animate beings, both human and on, some organic and some constructed (Bennett, 2020). The things given to children, the vast number of things present in any environment, they produce new meaning. Things construct, produce, and represent culture. Things are artifacts embedded in history.

Mr. C's Ice Cream Truck. In summer 2020, Mr. C, of the Shore, bought a truck which he converted to an ice cream truck with the purpose of simultaneously starting his own business and providing a healthy and productive outlet for his sons and nephew (Shockley, 2020). After purchasing the truck, he had lettering and graphics put on it and posted the idea of putting his

young sons and nephew in business on Facebook. His family business plan garnered a supportive response from the community. Mr. C set up accounting records for his new ice cream business on QuickBooks (an accounting software) and taught the three boys, ages ranging from 12-17, how to enter the transactions (Shockley, 2020). The truck was up and running in late July of 2020 and Mr. C and his boys have plans on visiting towns in nearby areas. Mr. C's youngest son noted in the news article that while he likes having the chance to serve ice cream to the community, he is really looking forward to having ice cream anytime he wants (Shockley, 2020). Figure 24 shows the family who is running the ice cream business.



Figure 24. Mr. C's Ice Cream owners. Photo courtesy, Ted Shockley When considering the vibrant materiality of summertime, the truck, the signs, the ice cream, the accounting software, social media, and Mr. C and his boys, we can question who and what influenced whom and what? Was it the truck who struck the idea? Was it Mr. C's love for his children? Was it the time and space of summertime heat and boredom? Was it social media which provided a platform for community support? Not a single item or space or time can exist on its own to create Mr. C's ice cream truck, but in fact, the assemblage of them creates a working system producing actions of what one generation will do for the next. This particular assemblage results in a single moment when a young boy tastes the cool, creamy sweetness of

ice cream upon his lips and tongue, gliding down his throat, nourishing his body on a hot summer day. To the child I now go with: ice cream. Bennett (2010) noted that the eating of food "constitutes a series of mutual transformations between human and nonhuman materials" (p. 40). Though when food is given in love, it nourishes much more than the body.

Semi-Formal Learning Spaces

A middle ground between informal and formal learning spaces was found in this research. I characterize semi-formal learning spaces as one that could have a built structure with a roof and four walls to create an interior space. Within that built place, there are territorialized spaces and times for more structured learning experiences. These are not formal school buildings, but multi-purpose places for learning and knowledge construction.

A Historic Museum

The Barrier Island Center is the former site of the Almshouse Farm (Figure 25) which was a homeless shelter, a place for orphans, and a place for people who were sick with diseases such as TB and smallpox. The people who lived at the Almshouse were segregated into two different buildings. The largest house was for White people. The smaller one in the back was for Black people, and the smallest building was the kitchen. Courts often ordered people to live there (Barrier Islands Center, n.d.).



Figure 25. The Barrier Islands Center plot with several structures.

The museum contains artifacts from these historic structures and the people who lived there: old doorknobs, a pair of worn boots, rifles. There are both historic and modern maps and aerial photographs done by a contemporary Shore-based photographer. Oral history records are housed at the Barrier Islands Center, local documentaries, and a small collection of books for both children and adults written by local authors. This is how the building that is the Barrier Islands Center stands today—a hub for teachings of the past. However, these objects in the collection do not tell all the narratives of the past. Sometimes the materials that shape a story are a bed and a knife (Johnson, Latimer, & Mihalyka, 2007):

Elizabeth Garrit Assaults the Overseer of the Poor, 1808

The Deposition of Edmund Johnson who is Stewart of the Poor House says that on July last the said Elizabeth Garrit came to the Poor House with an Order to the said Stewart to receive her and her three children, which was accordingly done; that the said Elizabeth not liking the appearance of the Poor House and abusing the said Stewart, this Deponent ordered her to behave better or he would make her, and after some altercation between them, the said Stewart took her by the arm and told her to carry her bed up stairs,

whereupon she struck him and then he threw her down and told her to behave, which she appeared to do; he then let her go and she carried her bed up stairs; a short time afterwards he heard some abusive language from her and he went up stairs and found her sharpening her knife upon which she told him that if he came near her she would let out his guts; that some time after this she left the Poor House and returned again about Christmas with another Order to admit her two children and not her, she finding a bed, which she brought and used similar language and again an altercation of the same kind took place that after this, to wit, the 20th of May last she came again to the poor House after having been repeatedly directed by the said Stewart not to come there; and the Stewart being absent, when he returned he found she had taken the bed which according to the Order of the Overseers had been brought there for the accommodation of her children. He asked why she would come when directed not to do so and in consequence another altercation took place, in course of which much abusive language as to the Poor House and Stewart ensued; He ordered her to return the bed and go away which she refused to do and threatened him again with knife and seeing her put her hand in her pocket he kicked her, she drew the knife and took hold of the bed which she threw over the fence, he then laid hold of her with intent to take away the knife when she stabbed him under the hip, he then threw her down and with the assistance of another person took away the knife after receiving several cuts of the hands and shewing her out of the bounds of the Poor House directed her to come there no more. (pp. 25-26)

This quarrel occurred because Elizabeth Garrit, along with her children, were assigned to the Alms House, which is now the Barrier Islands Center. These recorded depositions attest to the assault on the overseer of the Poor House. Elizabeth was tried in the Lower court for the felony of stabbing. In 1809, her case went to the Superior Court and upon trial, she was found not guilty. A year later she sued Edmund Johnson for "Trespass Assault & Battery", and he was found guilty and forced to pay Elizabet Garrit \$70, along with the cost of Court and a fee to each of his witnesses (Johnson, Latimer, & Mihalyka, 2007).

The focus on the knife and the beds for Elizabeth's children cannot be denied in this Almshouse story. The knife reflects the harshness of the Shore environment, the struggle for survival in a place poverty, when one has no home of their own. Elizabeth described how she ought to sharpen the knife on both sides to serve a more punishing blow to Mr. Johnson (Johnson, Latimer, & Mihalyka, 2007), as life seemed to have punishing for Elizabeth.

Bennett (2010) stated, "We need to cultivate a bit of anthropomorphism—the idea that human agency has some echoes in nonhuman nature—to counter the narcissism of humans in charge of this world" (p. xvi). In contrast to the brute of a knife, the comfort of a bed was a point of contention which stoked the arguments that unfolded and led to violence in the human body's fight for the basic need to sleep in safety. Elizabeth's children learned from this circumstance the importance of a bed, the effects of a knife and poverty, and the cruelty of humans fighting for survival. Environment and circumstances became the teacher at this place which is now one for semi-formal learning.

Today, the Barrier Island Center is a safe place where all are welcome. Along with being a historical museum, the Barrier Island Center hosts field trips for children. I first learned about the center because of these field trips, which specifically hosts first and second grade age migrant children in the summertime. During the field trips, the children are taught lessons about local history, and offered art and music classes. Local public and private schools during the school year also plan organized visits to the museum to learn about local Shore history.

The Local Public Library

Another important informal learning space is the local library. There are two public libraries in Northampton County and two in Accomack. All four libraries offer youth services related to reading initiatives. The library where the forthcoming study (to be described in Chapter 5) took place had a designated program director whose purpose was to initiate and uphold a variety of programs for children. Programs include outreach into area public schools for story time and writing projects. Specific to this study, the program director collaborated with me to develop the photography program for youth featured in this study, which was housed at the library. This semi-formal learning space will be described in greater detail in Chapter 5.

Formal Learning Spaces

Formal learning spaces—schools—are easily found on the Shore and were detailed in Chapter 2. Northampton County has two elementary schools and one high school. The middle school was shut down in 2008 for reasons to be discussed in the next section. As such, the elementary schools of this county house students up to grade seven and the high school enrolls grades 8-12. Accomack, a larger county, has five elementary schools, two middle schools, three high schools, and one combined school (Tangier) which includes all grades. There is a Christian academy for grades PK-8 and another small Christian private school that serves only 31 students. Also, an elite PK-12 private school on the Shore straddles Northampton and Accomack counties. It has a small student body of less than 200, but the grounds are large, and it has a \$1 million endowment, as advertised in a job posting on their website. The grounds are lush and well-kept in summertime, rich with trees and green fields, playgrounds, and sports fields. Figure 26 shows the small stadium at the sports field.



Figure 26. Academy stadium.

Formal learning places for the Shore's youngest, and also in low income brackets, can be found. I visited a Head Start which was housed in a building dually used as a community center for the elderly/older community, shown in Figure 27. While the sign says Hare Valley School, this is an old sign and does not represent what the facility now is. Upon further research, I was not able to find out the history of the Hare Valley School or why its use had changed to what it is now. There were many buses in the adjoining lot with Head Start labelled on the sides, as indicated by Figure 28. As such, transportation is provided to those who need it.



Figure 27. Head Start building.



Figure 28. Head Start bus dually used for the elderly community organization.

Head Start has two additional facilities on the Shore that specifically cater to migrant populations. These facilities are run by the East Coast Migrant Head Start Project. The website for these two migrant Head Starts of the Shore shows minimal information specific to these locations. Two images are provided for each facility, both being a small, white concrete box-shaped structure. If the viewer hovers over the images, a pop-up covers the image with text stating the crops associated with that Head Start. Crops listed were cucumber, peppers, squash, and tomatoes for one location; and holiday trees, peanuts, pecans, soy beans, sweet potatoes and watermelon for the other location. Beyond the site addresses and the two sites' directors' contact information, no other information is provided for these learning facilities that serve migrant children (East Coast Migrant Head Start, 2020). In these formal learning spaces, what the geography and organic resources cultivated there produce are the driving information for viewers seeking the place. Migrant families are known to come to the Shore seeking agricultural work and the places of learning for children are directly represented by that work.

While crops and produce and cultivation of the earth are tied to some children of the Shore, other children and their families' livelihoods are shaped by their connection to the water's resources. While some children's schooling takes place in large schools with low enrollment and acreage of manicured sports fields and playgrounds, other children attend formal learning places that are boxed in and small. In the conceptualization of space, whether it is a massive container (Greene, 2004) or an infinite, un-boundaried entity, it is open (Massey, 2005). In this openness, there are always connections yet to be made, the multiplicities of trajectories create an impossible-to-measure amount of interactions and futures (Massey, 2005). Children from wealth, children from poverty, children who have migrated across the continent merge in and construct a conceived place whose families have found a way to capitalize on the geography and all of its abundance there. They cultivate earth and sea, create a unique mix of culture and history from those whose families have lived on the Shore for generations and from those who migrate here. And for that, for the Shore, the future is open (Massey, 2005).

Lost Learning Spaces

Structures that once provided a place for children to formally learn and be educated can now be found on the Shore that are long vacant, with the natural environment slowly taking back its land. In this section, I will discuss two lost learning spaces on the Shore: The middle school of Northampton County and the Rosenwald School for African Americans.

The Middle School

Migrant farm workers are not the only people who have come to the Shore for opportunity. People seeking real estate investment in lower priced properties that boast panoramic views of great bodies of water have a history of coming to the Shore. While this may superficially seem like another economic benefit for the Shore's growth away from poverty and towards opportunity, this in fact, has been detrimental to children directly, as shown by the sole middle school of Northampton County which stands vacant and overgrown. It was shut down in 2008.

The middle school building was originally constructed in 1952 as the county's first purpose-built African American high school. The historical marker (made by the Department of Historic Resources, 2010) at the front of the school states that the high school was built to reflect "the desires of local African Americans to obtain modern educational facilities. It is an example of the statewide efforts of African American and Virginia Indian communities during the early 20th century to secure better education for their children." The original building contained classrooms, a library, a gymnasium, and a 500-seat auditorium. When Virginia's public schools integrated, the high school ceased operations in 1970, and it became junior high school and later a middle school for all county residents.

At close-up, the image shown in Figure 29 depicts a building in disrepair. Blinds hang at all different lengths, and left materials can be seen through the windows. The garden in the courtyard still blooms healthily, but it is overgrown. Grass and weeds are growing through cracks in the old cement.



Figure 29. The vacant middle school of Northampton County.

Haraway (2016) speaks of Latour's Gaia Stories; she calls them geostories. She explains, "Gaia is not a person but a complex systemic phenomena that compose a living planet" (p. 43). Gaia's intrusion into human affairs, Haraway argues, is a "radically materialist event that collects up multitudes" (Haraway, 2016, p. 43). Gaia's intrusion through the cracks in the cement of this lost learning place is evident. Took look closely at the fate of this old middle school through the lens of Gaia, one can see the weathering, the composting of a place is in fact a quite intrusive event that challenges typical thinking. Gaia makes one stop and question the tales of this school's modern history. And those who belong to its history must face the consequences of what they provoked (Haraway, 2016). The beauty of Gaia brought people here, to the Shore. The richness of Gaia's resources allowed humans to thrive here, on the Shore. The surrounding waters of this landscape, shaped by Gaia, can also be its undoing. The now vacant, lost learning space illustrates the consequences of the capitalization of Gaia, and how also how she has the strength to keep growing and changing the rubble cemented upon her body.

The reasons for the middle school's closure have been widely reported. When property values spiked across the United States in the early 2000s, waterfront land on the Shore became one of the most enticing deals available on the east coast, in particular for those who speculated they could quickly flip the property and sell it for even more (Jeter, 2008). The Virginia Department of Taxation reported that, between 1999 and 2005, the value of land in Northampton County more than tripled to \$2.84 billion (Jeter, 2008). However, during this peak period, actual real estate assessments lagged. State calculations indicated that Northampton County should have collected tax revenues from land worth \$2.84 billion and, therefore, should have been able to afford more of the school's bill. In reality, property was assessed at less than 45 percent of the

market value and Northampton collected much less than estimated. Compounding the problem was the fact that the county was steadily losing students (Jeter, 2008).

Historically, the school system has struggled to keep students, as families often leave in search of better jobs. With the spike in property values during this boom, many families became priced out of homes due to increased rent and mortgage payments. Moreover, newcomers were buying to invest in property rather than move their families and raise children on the Shore. Thus, with the school budget in peril, drastic cost-cutting actions had to be taken, and the county's only middles school was closed (Jeter, 2008).

In contrast to the fate of the middle school, some of the prosperous residents favored local private schools, and private school enrollment gradually increased. Others paid to attend Accomack County public schools, and some chose to homeschool their children. The 2008 news article (Jeter, 2008) reporting on the school closure ended the article stating:

Meanwhile, officials are trying to figure out what to do with the middle school building. (Decision-maker) doesn't want to make drastic changes to it, in case student enrollment rebounds and the county can afford to reopen the school. 'We always keep that in the back of our mind,' he said, 'that we may need that building in the future.'

Today, in summer of 2020, the building remains vacant and the slow weathering that happens when humans cease the attempt to "tame space" (Massey, 2005) makes this school a lost learning space. And, from beneath the surfaces of the human structure that was the school, a world of living flourishes and sprouts. As one material diminishes, other matter prospers. Long ago now, the students who were left without the option of transferring out of Northampton County public schools were dispersed to the two local elementary schools and eighth grade was moved to the county's one high school.

Rosenwald School

In 1928, the Pennsylvania Railroad sold 2.5 acres of land to the town of Cape Charles to build a new African American school (Vaughn, 2018). Thus began a story of partnership between the local African-American community, educator Booker T. Washington, and businessman Julius Rosenwald. The school was named for its beneficiary, Rosenwald, an executive at Sears, Roebuck, and Company, who partnered with Booker T. Washington and Tuskegee University in 1912 for the purpose of creating more quality public education schools during the period of legal segregation, for African Americans in the rural South (Vaughn, 2018). The 20-year partnership resulted in nearly 5,000 schools with more than \$4.3 million coming from the Rosenwald Fund. In keeping with Booker T. Washington's philosophy of education, which was grounded in the idea of self-help, the local black community provided fundraising and the labor to help build the Rosenwald schools like the one in Cape Charles, and across the South, with more than \$4.7 million raised by African American communities (Vaughn, 2018).

The Cape Charles Rosenwald School, with its four-classrooms and auditorium, opened to students in 1929, serving Black children in grades first through seven. Three teachers and a principal, who also was an instructor, were employed there for much of its history. The school closed in December 1966, when Northampton County consolidated its schools (Vaughn, 2018). The students were moved to Cape Charles High School immediately thereafter, making Cape Charles one of the first school districts on the Shore to technically integrate. However, at this initial time of consolidation, students were segregated by classroom and it was not until four more years that they fully integrated (Vaughn, 2018).

In 1968 the school was sold to the Robberecht family, who used the building as an eelpacking plant until 1977 (Jackson, 2019). It has remained empty since, but recent plans for a restoration are underway. While many Rosenwald schools were built with wooden siding and have not withstood weathering and time, the Cape Charles school's brick exterior has remained in fair condition time and it is restorable. As such, a local professional urban planner and high school graduate of the Shore learned about the history of the old four-room school from her grandmother. She has set out to restore the school (Jackson, 2019). Tevya Griffin became the president of the Cape Charles Rosenwald School Restoration Initiative in 2009, and in 2014 it was awarded nonprofit 501(c)(3) status. Several of the members in the organization are alumni of the Rosenwald School (Jackson, 2019). After nearly a decade of fundraising, the Rosenwald School Restoration Initiative bought the school and 2.5-acre lot in early 2019 from the Robberechts. Private donors were the primary beneficiaries for the purchase, and the nonprofit is seeking other sources, including grants, for the restoration of the building (Jackson, 2019).

The Initiative's next steps include making decisions about the possible uses for the restored building. Possibilities include a workforce development center, a meeting center, a performance venue, a community kitchen, or a place for children's STEM and STEAM (science, technology, engineering, art, and math) classes. The Rosenwald School Restoration Initiative's main goal is that the historic school's re-use will not be a museum, but an integral part of the community where all are welcome (Jackson, 2019).

I visited the Rosenwald School in early July 2020. It rests just alongside a road that leads from the town to another neighborhood. Along the road is a path for golf cart travelers, a sign for a local democratic candidate for senate, and the historic plaque for the school, as shown in Figure 30. The union of old and new structures, political preferences, and the implications of living in the South set the scene.



Figure 30. The interaction of history, culture, and geography at the site of the school. There was an area to park to the right of the school, and I got out to take several photos at different angles of the school (Figure 31). The front doors are chained shut and windows are boarded up. Signs from the eel packing company, the building's last ownership, remain.



Figure 31. Front view of the Rosenwald School for African Americans.

As I returned to my parked vehicle, I looked along the side yard at the right. A sudden, strong urge came over me to find out what might be behind the school: *There may be signs of childhood that remain. Perhaps an old play set or swings.* I moved into the side yard: Figure 32.



Figure 32. View of side grounds of the school.

As I walked into the yard, close to the building, I immediately noticed that the side door was missing and one could easily enter the old school, as shown in Figure 33. I peered in, took one step, two steps. Old planks of wood, miscellaneous items were scattered about. Having gone far enough, I returned to the yard and walked further around to see the back, looking for my signs of childhood, old things left to time and Gaia's weathering. Unexpectedly, instead, I found something brand new.



Figure 33. Open entry into the Rosenwald School.

Just around the corner was the back wing of the building, and something moved by more boarded-up doors (Figures 34 and 35). Upon seeing me, a fawn tried to get to her feet, but could not, or would not, and hunkered down like she wanted to sink into the concrete to hide. I moved toward her maternally. She looked to me as I talked softly to her. *Where's your momma?* We made long eye contact; I felt her fear. *You're okay. I'll go.* I slowly backed away, the search for a play set forgotten.



Figure 34. The fawn by the boarded-up door.



Figure 35. Signs of childhood were found.

I returned to the front of the building and got into my car. I drove back over the 17-mile bridge to my home. The little fawn would not leave my mind. How would I ever know if she was sick and abandoned? Once home, I researched mother deer behavior. I learned that the mother deer will leave her baby in what she has deemed a safe and hidden place for up to 10 hours a day while she watches over her baby's nest from afar. She does this as a way to keep her baby safe, as her large size is much more likely to be visible to and attract predators. The mother will return to nurse her baby and frequently move her baby to new locations. A fawn is able to walk as soon as it is born, so as for the fawn not successfully getting to her feet when she saw me, it may have been because it was instinctive for her to want to hunker down to hide. The fawn had been left on an elevated slab of concrete in this place untouched for years. A new childhood was found, in an unexpected way. I will never know what happened to the fawn, because this was the very last visit to the Shore and Figure 35 was the last photograph I took as part of my photo documentation methods for sensory ethnography research. The fawn stays with me as part of this place, that space, and moment, forever frozen as digital imagery in my mind.

The story-so-far of the researcher and the story-so-far of the new fawn, moving forth in different trajectories, even different worlds—the built world of the human and the natural world—merged in the moment of finding each other. The plurality of lives within a space and time leads to unforeseen meetings of different species that can be significant enough to change the course of the other's lives. Haraway (2016) would see meaning in the meeting of the fawn in this space of a learning place lost to time because of politics and power, race and change, economy and money. Haraway's own "multispecies storytelling is about recuperation in complex histories that are as full of dying as living, as full of endings, even genocides, as beginnings" (p. 10). In fact, Haraway stated that she is not interested in restoration, but seeks deep commitment to the possibility of slight recuperation and "getting on together" (p. 10). And here in this space of the old brick schoolhouse, the overgrowth over open doorways, and the birth of new life, there is no taming space. There is no human exceptionalism. The rich earth grows over layer upon layer, weaves a fabric of time and space that envelops and contains a four dimensional multiplicity of intra-actions that coexist and influence each other at the core of each agentic vibration at the atomic level (Barad, 2010; Greene, 2004). The researcher too became part of the space, stepping upon the grass, moving aside the large leaves to see within, approaching the fawn, the sound of the camera's shutter clicking along with the cicadas in the trees and the chatter of a family in a golf cart going by.

Young Adult Perspective

New generations of Shore people bring fresh life and voice to the historic stories and the cultural traditions of a place. As such, two young adult perspectives were gathered for this study. I first present Emma, a child of the Shore who is now a recent college graduate with a passion for Shore history. I interviewed Emma in July 2020. After, I present Bobby, who was the Keynote

speaker at the May 2019 Kids Count Forum. Bobby spoke of both personal and historical perspectives of childhood, family, and community in his address. The Forum was hosted by the Shore's local community college, and I attended the 2019 Forum as a poster presenter. Bobby's speech was video recorded and posted publicly on YouTube, which has over 300 views (Harmon, 2019).

Emma

Emma was born and raised in a town in Northampton County on the Bayside of the Shore. She lived there from the time she was born in 1997 until she was 15 years old and a rising freshman in high school. Her father was part of his family's three-generation business, a 700 acre wholesale nursery that distributes plants across the mid-Atlantic region of the United States. Her father also served on the board of supervisors for Northampton County. Emma's mother was a teacher at the local private school but when she became pregnant with Emma (the oldest of four) she became a stay-at-home mother. Emma attended the same well-established private school whose sports stadium was presented in a previous section, the Academy. She began school there in pre-kindergarten and attended until 8th grade. Emma described her classes as being small and the teachers as excellent. She said that at school everyone knew everyone, which is how it is on the Shore as well.

Emma's family moved west to the Blue Ridge Mountains of Virginia where she completed high school, though they returned to the Shore every year for the summer months throughout her high school years. Emma noted that 4th of July was an important holiday in her community and, more broadly, to most people on the Shore. Community activities her family participated in for the holiday included the 4th of July run, an annual picnic hosted in a town

resident's yard; and at night her family would take a boat out on the creek to watch fireworks set off from a multitude of locations.

As a college graduate, Emma has recently moved back to the Shore to live permanently. She attributes this permanence to being hired by a local history museum in a full-time position. Currently she is part of a team that is doing historical research in order to build a new exhibit at the museum. Emma grew up with a respect and knowledge of her own family's long history on the Shore, and more proudly, the Shore's history. She explained that, as a child, she had firsthand experience learning about the Shore's Native Americans because her father took Emma and her siblings hunting for arrowheads in the plowed fields at his nursery. Emma also knew that the Northampton County courthouse contained the oldest court records in America, and she was aware of the history of the Barrier Islands because she had visited the Barrier Islands Center, which is the place where she now participates in historical documentation and research.

When asked about childhood on the Shore, Emma noted that she had a wonderful childhood:

because the amount of outdoor activities the area provides are endless. The Shore is so rural that many parents felt safe enough to let their kids roam around outside without any type of close parental supervision. In my opinion, kids who grow up on the Shore are more independent and mature faster because of this. Growing up, my family did not have access to a television or a computer at home, so I always had a book on hand to read when I wasn't able to go outside.

Outside was what Emma seemed to enjoy most, and the organized and informal activities she described as part of her childhood all took place outdoors. When she was four, she began horseback riding. She said, "I would attend riding lessons at a barn in (town) and cherished my time there with my friends, my instructor, and the animals. I attended local horse shows all over the Shore and was eventually gifted my own pony which I kept in the pasture at my house in (town)." Additionally, Emma participated in many organized community sports at the "ball field" such as t-ball, machine pitch baseball, softball, and soccer, and she explained that the field was like a second home for herself and many other children in the community. Emma also placed importance on the fact that specifically growing up on the Shore cultivated a love for water activities and in the summertime, she said,

I could typically be found either in the Chesapeake Bay or the pool at the (country club). I learned to waterski when I was four and I enjoyed being towed around the creek while my father operated the boat. The country club was a social hub for kids my age and we would spend hours in the pool playing games such as "categories" or "marco polo."

Unstructured play was very much part of her childhood experience. She noted again that her parents were very "hands-off" and allowed her and her siblings to play all around their small town without any adult supervision. When speaking of other children of similar age in her town, she said they would often meet at each other's houses and ride bikes or roller blade in a local church or post office parking lot. They also loved to build "forts in the woods near our houses made of tree limbs, sticks and old metal poles. There was also a newly dug irrigation pond just a short walk away through the field surrounding my house. We would hike up the sand dunes and then slide down them to the water's edge."

What emerged from Emma's interview were detailed descriptions of the informal learning experiences she had with the natural and built environments of the Shore. When asked about her formal education, her response was brief, and it seemed that formal education was a mere backdrop against vibrant and rich experiences she had that shaped her childhood and meaning making. From her time at the horse stables, to playing on the grounds around her home and neighborhood, the local pool and the Bay, her descriptions of childhood outdoor experiences were rich and detailed compared to her remarks about formal schooling. Her father's artifact expeditions at the family's nursery impacted her future so much that she sought out a profession in history and historical research. Specifically, the history of the Shore, including her family's personal history, cultivated such a passion that she returned there after having lived away for several years. Emma's narrative speaks to the deep influence of place, the core of what this study aims to illuminate. Emma's deeply embedded interactions with the waters of the Bay, the horses on the large farms, the digging up of artifacts in plowed earth, and the hours of independent childhood play with human friends, built structures, and the organic things of the Shore shaped the woman she has become and the lens through which she views this place. This is a place she has chosen to continuously engage and interact with and to be continuously reshaped through new learning experiences.

Bobby

Bobby is an African American man is his twenties whose both paternal and maternal families have lived on the Shore for generations. Bobby's mother and father moved to a larger city across the Bay where they felt, at that time, there were better opportunities. Bobby's father attended a local HBCU in that city while his sisters worked in the fields of the Shore, earning money that they contributed to their brother's (Bobby's father's) education. Bobby explained that he and his family came to the Shore frequently throughout his childhood to visit his grandparents, aunts, uncles, and cousins. When he became a young adult, he moved to the Shore and attended the local community college where he has earned an associate's degree. In addition, he serves in several community endeavors working with youth, and he has started his own farm. Specifically, he teaches chess at the library where the photography program to be highlighted in this study took place. Bobby has a great interest in local history and has given presentations about local Black figures of Shore history at the library since my own time there. Additionally, he works with youth at the local high school and has been a counselor at the local 4H Camp. In his keynote speech at the 2019 Kids Count Forum at the local community college on the Shore, he spoke about childhood on the Shore, the culture of his family and local communities, the youth he works with, and what he thinks children of the Shore need today to stay and be successful.

All four of Bobby's grandparents were born and raised on the Shore in Northampton County. His grandparents played an integral role in raising him. In his speech, Bobby emphasized several times how different his two sets of grandparents were even though they all came from Northampton county. His mother's family was more "middle class" and his father's family he described as "more on their own." Proximity to the main highway that runs through the Shore punctuated his description of the differences between families:

my mom's family lived close to 13 and my dad's family, they lived kinda far back where what people called the Back Woods back then. My mom's family had small businesses and my dad's family had a farm and they raised pigs. So I got all aspects of Shore life. My mom's family dressed up nice and went places and stuff and my dad's family, they were very independent. They did many things for themselves, like when my dad went to

(HBCU), his sisters worked out in the fields to send him money to get through college. Bobby noted that the differences between the two families gave him a very full view of Shore life and a good comparison to the city life where he lived, which he described as having silos of races by neighborhood. He said, "The Mexicans are with the Mexicans, the Blacks are with the Blacks and everybody in the city has their own space in the city. People on the Shore are kind of mixed a little bit better because of the interdependence." Bobby spoke extensively about the interdependence between Blacks and Whites on the Shore through the story of his grandmother:

So my grandmother was a housekeeper for many prominent families on the Shore like the (name) and stuff like that. And so my farm that I own now, they tied it up in like a homestead act so you know we can't lose it. And we got that benefit because my grandmother was their housekeeper. So growing up I saw that that is how you gain opportunity. You get involved within your community and you serve some type of purpose to the people here.

Attending 4H camp was how Bobby first started getting involved in the Shore community outside of his own family. From there, he became a counselor, and he described how he always felt he fit in with the Northampton group because of his cousins' presence. Now, as an adult, he still feels connected because many of the children at the camp, he has worked with through the local Shore high school.

What Bobby noticed as different about the Shore, as compared to the city, is what led him to stay. The way of life, he explained, is slower and he believes that this is what makes it a great place. Not just the pace of the environment, but the safety of the rurality gave him freedom as a child. Bobby explained:

Where I could play and go and run up and down the street, you couldn't do that in (city). My mom was like, "I need to see you when you are outside on that street. If I can't see you that's a problem." So I just took every chance I could to come here because there was more sense of freedom here on the Shore with my cousins, where we could just be playing outside all night long until our grandma called us in. It gave me a higher sense of consciousness or awareness. So when I was in (city) things were different, so I began comparing things early.

Tight-knit community is one thing Bobby consistently noticed about life on the Shore, and he saw that community connectedness led to greater success. For example, his grandfather ran an inn in a local town (which is now a fabric store). His grandfather provided a hang-out space there, and many people came. Through the networking, connections and shared space, folks gave him things, looked out for him, and made sure his family ate. Bobby compared this community to the city where he lived across the Bay, explaining how his city friends' parents had jobs, and many of his Shore cousins' parents were participating in local entrepreneurship. Also, his friends in the city often did not know their family histories of where they came from; their parents came from all over the U.S. and there was a lot of moving. Bobby's family has resided on the Shore for generations. He said his grandmother has 75 grandchildren, and he knows who are his fifth and sixth cousins in the area. Bobby shared that because of his roots and experiences of familial connection and support, he decided to settle on the Shore and get involved with helping youth. He stated that his "cup runneth over from the Shore."

Bobby lamented about the importance of gathering spaces both for youth and for adults, and how some of those have been lost. For example, he said as a child some Sundays he would sit at short stop with his grandfather, and this activity was not just a recreational thing for young people, but it was recreational for older people too. He named a local skating rink, a pool hall, and video arcade; these all were spaces for gathering and play for people of all ages. Bobby noted that meeting places for folks are where "ideas gave birth," and with so many now gone, the Shore ought to aggressively look at how to enrich the aspect of community life with creating new communal spaces for a new generation. Bobby talked at length about the struggles of youth, the next generation, on the Shore today. He described teens that he has worked with at the high school feeling discouraged and that they believe they need to leave to ever be successful. Bobbly challenged the Kids Count community, stating, "To me that says we haven't given them a reason to live, and they are waiting to live their life when they turn 18 and get off this Shore." He shared that as a young person he worked for eight months at the Purdue factory on the Shore, and he learned right away that "I like wearing a suit better." He then made his remarks directly to the older people of the audience:

I'm telling you now, the generation behind me, they are not going to work at Purdue. They're not going to work for \$7.25 an hour either because first moving back it was pretty hard and I had several job interviews, but I had to turn several jobs down because all they could offer me was \$7.25 to cook and be a cashier and those are some of the things that have to be addressed. Youth are not working for \$7.25 because now that you have educated them and they know they need more money than that to live out here, they are not going to work for that. We have to start addressing certain things if we want things to move forward because the community that's here keeps the Shore alive. We don't want people to be lost and we can't allow those people to get lost.

Bobby went on to discuss how the closure of the middle school sent the message to many children that they were not worth "investing in." He argued that youth notice when a community is not cared about or not accepted. He recalled a conversation with a student at the high school who came from a high poverty neighborhood. The student confided in Bobby that he felt he did not have many options in life because of the neighborhood where he grew up. Bobby asked why he would think that, and the boy said, "You know what they say about (town)." Persistent attitudes and ideas do affect Shore youth and Bobby said that it hurts their confidence and "whole mindset and that leads out to their effort." Bobby stated that Shore stakeholders must address the disparities to change the Shore for the better: "A lot of people are left behind because of certain labels tied to certain communities. I believe to address the disparities we need to start with addressing these labels by being more inclusive with our community, because if you look out on the Shore there's always going to be an interdependence" (Eastern Shore Community College, 2019).

The interdependence Bobby speaks of, that has occurred for generations between races and classes on the Shore, is a result of deep embedded entanglements that manifested within the Shore's time-space when Africans were first brought to the Shore. To consider the interdependence of humans and human activity, the concept of a societal assemblage emerges. "Apparatuses of bodily-production are intra-acting with and mutually constituting one another" and through this intra-action the multiplicities of bodies, of trajectories, are all part of entangled genealogies and ever-changing materialities (Barad 2007. P. 389). Barad argues too that each bodily apparatus is in itself a result of intra-actions with the material and discursive, matter and the language that makes up our reality. Bobby's experiences visiting his family on the Shore so frequently as a child fundamentally shaped him in ways that living in the city did not. The pull of the freedom of space, running into the night with his cousins; the freedom of time within that open space, where and when night came, and he still ran freely out in the open.

The importance of community spaces that made the place special, known, rich with memories was vital to Bobby's learning and meaning making as he grew up. Moreover, the differing experiences he had with places (city versus Shore) contrasted and pulled him to the side he preferred. Bobby was influenced and shaped by subcultures and the iterative reconfiguring of his conscious awareness of what constituted a good life. He chose the Shore again and again, through his becoming a camp counselor, teaching chess at the local library, working with youth in the local public high school, attending college there, and buying his own plot of land to farm. Bobby's clear desire for interdependence and belief in community are what drive him to speak for important shifts on the Shore. Barad stated: "We are 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 shaping and through which we are shaped" (p. 390). Bobby spoke to the Kids Count Forum attendees in this manner—the Shore has remarkable qualities, a foundation of interdependence and an essence of kindness that can be built upon, but all members must engage to provide more equal pay and opportunity, restore community spaces, and change fixed, racial mindsets for the betterment of youth.

CHAPTER 5

FINDINGS: PART 2

Shore Kids Photography and Book-Making Program

This chapter describes in detail the implementation and results of the place based learning program, *Shore Kids*, which entailed using photography and book-making to investigate and connect with local environments. A library program director and I implemented the program at the local library in a historic town of the Shore. *Shore Kids* was set to run for approximately six weeks, meeting once a week on Saturday afternoons beginning in late winter/early spring 2020. Due to the COVID-19 pandemic, the program had only one formal meeting, however a large number of photographs were taken on this one day. This chapter addresses this study's third research question: In what ways does engaging rural youth in participatory research using arts-based tools produce alternative discourses about living in rural places?

Artifacts from the program and children's images were analyzed iteratively, both through thematic content analysis and through diffractive readings to synchronously honor the patterns and themes that existed in the data and the theoretical significance that emerged from that thematic analysis and the children's captured imagery. Further, I discuss how both methods of analysis fit within the context of the study, are mutually supportive, and lead to new insights about the historical, cultural, and, importantly, geographical influences of knowledge construction and learning.

Description of Program Implementation

The first day of the photography program was a cold, cloudless day in early March 2020. The strength of the wind caused official restrictions for crossing the bridge from my home to the Shore early that morning; however, as the sun rose higher, the wind died down enough for safe crossing. Huge waves were on the Bay and the wind blew the white caps in a spray of white mist. The sun shone on the rough waters making millions of diamonds of light. It was a beautiful day for visual imagery.

The first session of the program was well attended. Eighteen children gathered on the floor of the early 1900s library to listen to the program director, a skilled photographer, teach the basics about capturing digital imagery: subject, perspective and angle, and color in photographic images. All parents stayed to watch the presentation and join the photography walk.

The program director and I co-planned this introductory lesson (Appendix G). I made a draft of the first meeting agenda and sent it to the program director. She suggested that we include a minilesson about perspective, which I then included in our written plan. I asked her to bring in some prints of her own photography to use for the discussion, which she did. She brought in two pictures of the same bright orange leaf at different angles, a child's foot in a wave, a picture of a brick wall on a city street, and two of the same pictures of a dog—one in color and the other in black and white.

The program director began her discussion with two printed images of the same orange leaf. Both images showed a close-up of the leaf; small water droplets covered it. I interrupted her briefly to ask her if it was the water droplets that had attracted her to the leaf and led her photographic decision. She countered that, no, it was in fact the color of the leaf. She explained that this leaf was the only bright orange leaf that had fallen to the ground, so it was the color that attracted her. Next, she described her picture of a brick wall—specifically, where she was and the perspective she chose. She encouraged the children to think about what they could capture taking pictures of a city street. After, she showed the image of a child's bare foot being washed over by a small wave. The children giggled. Lastly, the program director showed two prints of the same image of a dog in a room, facing the camera. One image was in color and the other in black and white. The children remarked how the black and white made it look "old fashioned" and the color image projected a feeling of happiness.

Next, I showed some outdoor playground shots that children created from a similar program. There were puddles in the images and a participant asked, "Was there a flood?" I confirmed it had been a rainy day. I then led more discussion about how the environment shapes the imagery that can be captured. I asked, "Could you take a picture of climbing a tree if there were no trees?" I also pointed out that the children in these pictures lived in a city so their imagery might be different from another child's imagery who lived in the mountains. I asked them to think about how the place where you are shapes what you can capture.

I gave the children cardboard frames and discussed the importance of once the subject is selected, that it needs to be fit within the camera display frame. I took two volunteers and put the large cardboard frames up to their faces. I showed how to center the subject and I also showed an example of the Rule of Thirds, where the main subject of your image is off to the side—not centered. One child pointed out that when you do not have your subject in the center, and rather off to the side, you can capture the environment that the subject is in.

After this discussion, I showed the children my research questions and talked to them about being scientists and researchers, I asked them what scientists and researchers do. One participant offered that scientists ask questions, do experiments, test things. I told them that they would be co-researchers with me. I told them that their cameras would be their tool to investigate their environment and capture how special the Shore is. From there, I gave each child his or her own Nikon camera which came in its own camera case or sack, along with a microfiber lens cleaner, batteries, and 8 or 16 GB SD card. I had a few different Nikon digital point and shoot camera models, for example, Coolpix A10 and Coolpix L120. We passed out markers and everyone wrote their initials on the little sticker I had put on every camera and every SD card. I taught the children how to use the main camera tools which included: turning the camera on/off; using the zoom function; using auto mode, finding and pressing the shutter and taking test shots; viewing their photos in the display; and deleting unwanted photos.

Finally, it was time to go out on our first photo shoot. I took suggestions for where the children wanted to go. Amidst the talking and excitement, children piped in: *The LOVE sign, the dock, the water, the beach.* All the parents joined. We walked down to the waterfront of the historic town, a couple of blocks from the library where a LOVE sign constructed of various materials stands. As we walked, children were snapping pictures everywhere. Along the street, crossing the street to get closer to a boat; one participant knelt down and pointed his lens upwards at trees and houses to get different angles. One child used figurines to imagine them as characters in a setting, standing them in different places and took pictures. The day was still cold and bright, and the wind strong. Down at the beach front, the children were intensely engaged. Some parents watched from a distance and talked with each other. Other parents stayed closer and engaged with their own child. I talked with both parents and children, and the program director in a free-flowing casual way.

After about 30 minutes, I gathered everyone to return. I walked with one participant on the way back and asked her about her schooling. She explained that she is homeschooled, and I asked if she was a part of a homeschool group. She said on Fridays she meets with others to do activities. She noted that she is a dancer. She said her sister would rather sit home and write. I talked to her sister next, and she confirmed her love for writing animal stories. Once our group returned to the library, we asked the children to look through their photos briefly and delete any that were blurry or that they did not want. Then we took suggestions for our next meeting. Some children suggested a walk around the historic town. Two sisters suggested the central town park and the Christian school (where they attend school). Others suggested natural settings such as a nearby state park and other walking trails. The program director suggested the wildlife refuge. Another suggested a local public elementary school (suggested by a student who attended that school). I wrote every suggestion down on large butcher paper and led a vote for our destination for the following week. The state park won the vote. Parents affirmed they were willing to meet there next Saturday. The program director said that she would work with a local ranger to get a group rate or free admittance for our entry to the park, and our meeting adjourned.

A couple days later schools shut down due to COVID-19 and the program was discontinued for the immediate future. We assumed we would be able to continue in the summer. As summer came, we realized that we would have to wait for fall. And then, as decisions about schools and venues teetered on the continuum of social distancing, we knew too that the program would be discontinued for the unforeseeable future. With this decision, I chose to work with the imagery and data I had collected from just our first meeting. I emailed each parent copies of their children's photographs and offered to make one community book for the program participants, where originally, each child had the option of making their own book through a lengthier process of selecting many images from multiple photo shoots. I asked each family to have their child(ren) select about four images from the set I sent, and for those images, write/type captions and return the captions to me via email. Five children responded with selected images and captions, and I took on the job of assembling the book from there. Once I finished compiling the five children's work into an online book using the Shutterfly book-making application, I emailed each parent the information to login so they and their child(ren) could review the book. I asked them to look it over and communicate with me if they saw anything they wanted to be changed or adjusted. This stage of the process resulted in no requested changes, so I ordered a copy of the book for each family and one copy for the library program director (so the book could be housed at the library in its collection of local authors).

The following sections present the data collected from the program in two modes of analysis. First, I conducted a thematic content analysis as a way to systematically organize and analyze the set of photographs (Rose, 2012). I begin this chapter presenting the findings of the content analysis. Then, I transition from these methodological findings towards a post-qualitative analysis through diffraction and deep connection to theory. To ground the transition between these two, often confounding methodologies, I give examples of some participants' final products—those selected images for the book and accompanying captions written. These final versions of the book-making part of the project will offer a theoretical analysis which can then be tied back and connected to the findings of Chapter 4 as well as the themes that emerged from the content analysis.

Thematic Content Analysis of Digital Imagery

The data from 13 participants ages 6-14 were collected in the form of digital imagery. In total 474 photographs were taken and one thirty-second video. Each child had their own device/camera to use, fitted with a personal SD card throughout the photo shoot. Cameras and SD cards were initialed and recollected after the photo shoot. I made a Google folder for each child and uploaded every photograph taken into each child's respective folder. The data analysis took on an iterative process that went through several stages. Table 1 shows the first stage of

analysis, which was the organization of the participants and their data. Table 1 provides a list of the participants' names and the number of photographs each participant took.

Participant ³	Age	Number of	Number of	
		Pictures	Videos	
		Taken	Taken	
Krista	13	10		
Sarah	11	11		
Ali	11	21		
Diana	12	23		
Gabriella	6	26	1	
Chelsea	11	36		
Allison	14	37		
Matthew	12	37		
Isaiah	10	45		
Martin	12	48		
Daniel	12	57		
Cole	9	61		
Teon	11	62		
				Total
				Images/Video:
				475

Table 1. Number of pictures taken by each participant.

Table 1 is organized as a continuum of number of pictures taken that flows from the least number of pictures taken to the participant who took the most.

For the second round of analysis, I viewed every image in each participant's folder to develop categories of meaning for the images. Table 2 indicates the first 46 codes developed. These 46 were then combined based on similarity, which is discussed next.

³ Pseudonyms were given to participants to protect anonymity and follow IRB protocol.

	DNUT	1 .1 .	• • • •	1 .4.0	F (1	TD (01)
	Do Not Enter	bathrooms and	captain statue	boy with Gun	Feather	Test Shots:
	sign	drink machine			CI (1)	Indiscernible
	D	1	design in	dogs	flowers/plants	
	Emergency Exit	boat	cement	0 11 (0 1 1	 ,	
	only sign			family/friends	Horizon line/	
		bricks	picnic tables		beach/water	
	Historical			family/friends		
	plaque	fire hydrant	puddle in the	on LOVE	Rocks	
			street			
	Private Property	houses/		feet/shoes	Sand/organic	
	sign on beach	buildings	sidewalk (just		material in sand	
			cement)	footprints		
		LOVE structure			Shell	
			street	reflection of		
		marina in the	scene/display	selfie/selfie	trees/sky	
Sorted		distance	(from a			
Codes			business)	Test Shots:	Waves	
		picture taken on		friends/family's		
		a friend's	street art	face		
		camera display				
			street/sidewalk	Test Shots:		
		pier walkway	view	pics of		
				researcher/		
		structure out in		program		
		the water		director		
		Test Shots:		Test Shots:		
		pics of		Kid Cam face		
		library/books		(close-up image		
				of a child		
		vault in library		holding a		
				camera up to		
				take a picture)		
				C1 1 C		
				Shadow of		
				self/others		
				Trans (final)		
				Toys (figurines)		
				in a setting		
Themes	Signa	Built Things	Street Scene	Pooplo and	Pure Nature	Practice and
Themes	Signs	Dunt Things		People and	I ule matule	
			and Display	Pets		Play

Table 2. Codes developed in second phase of content analysis, narrowed into themes.

In the next stage of analysis, these 46 codes were then sorted into broader themes based on similarity among codes. The themes in broader categories became: Signs, Built Things, Street Scene and Display, People and Pets, Pure Nature, and Practice and Play. Figure 36 shows the number of images within each category.

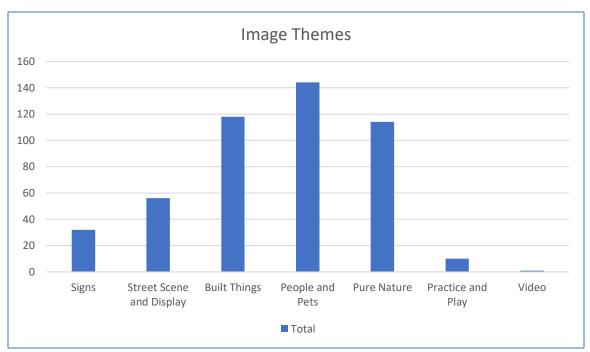


Figure 36. Emerging themes from content analysis.

With the broader themes now identified, the next stage of analysis asked: *How did the lesson prior influence the participants' photographic decisions?* This question was important to pursue because, with the participatory nature of this program and children's agency at the forefront, I wanted to see and understand how the interactions between adults and children manifested in the images, and if and how the interactions between the children and matter dictated other types of images. As such, the next phase of analysis, sought to look for an overlap between the topics/themes taught in the lesson prior to the photoshoot and the themes that emerged from the content analysis.

Images as Reflections of the Lesson

For this next stage of data analysis, I revisited the lesson agenda document, which is an outline of what the program director and I co-taught before the photo shoot. In conjunction, I reviewed the field notes I wrote after the program that day, which detailed the images we used as examples during the lesson. I also had on hand the images I brought to show during my portion of the lesson, where I led the discussion. I analyzed the two documents (lesson agenda and field

notes) and the images shown to the children during the lesson to extract what was specifically taught prior to the photo shoot. This was done through a content analysis.

In this content analysis of field notes and the lesson agenda, I pulled out each topic taught of the lesson and matched it with the image used to provide a visual for the children. I looked for correlation between the lesson agenda and the field notes. The field notes also provided a description of children's responses within each topic.

Once the topics, or themes, of the lesson and photographic examples were determined through the analysis of the lesson materials and fieldnotes, I went through another cycle of image analysis. I went back to the initial coding of the 474 images and 1 video to find correlations between what was taught in the lesson and what the children captured, and found numerous instances of alignment. Table 3 organizes the topics/themes taught and then provides a column aligning the imagery with similar codes.

Topic/Lesson Theme	Photographic Example	Brief description of discussion	Correlating Codes
Perspective in Nature	a bright orange leaf	Take a picture of the same subject but coming at it from different angles A subject that sticks out in environment	flowers/plants feather fire hydrant
Subject	brick wall in a city	Photographer thought the brick wall looked cool. She was walking down the sidewalk/street.	street/sidewalk view bricks
Capturing Play	child's bare foot in the waves at the beach	What kind of picture would you want to while playing at the beach? Someone said the ocean. Someone said a boat.	family/friends waves feet/shoes horizon line/ beach/water boat
Color	two of the same pictures of a dog- one in color/one black and white	The group discussed how the two give off a different feeling.	dogs Kid Cam face (black and white) trees/sky (black and white)

Table 3. Lesson examples, discussion, and correlating codes.

Environment	children at a playground/action shots of children playing/lots of puddles	Environment shapes the things you can capture. If there are no trees in the environment, then you would not be able to capture a tree.	trees/sky family/friends on LOVE boy with gun puddle in the street
Rule of Thirds	Cardboard frames to play with and frame each other's faces	Discussed difference if the subject were right in the middle or off to the side, you would be able to capture the environment the subject is in.	friends/family shell
Close up	Oyster shell	Discussed how a background can be blurred to really focus in on the subject.	Shell
Location for photo shoot	Children's suggestions for place to go for photo shoot	Ocean (repeated) Boat (repeated) docks (pier) LOVE	horizon line/ beach/water boat pier walkway/rocks LOVE

These data specific to correlation between the lesson topics/themes and initial coding process

were quantified to show that there were 238 correlating images, or 50% of the total set of images were found to be reflective of the lesson that occurred before the photo shoot. Figure 37 provides a visual analysis of these numbers.

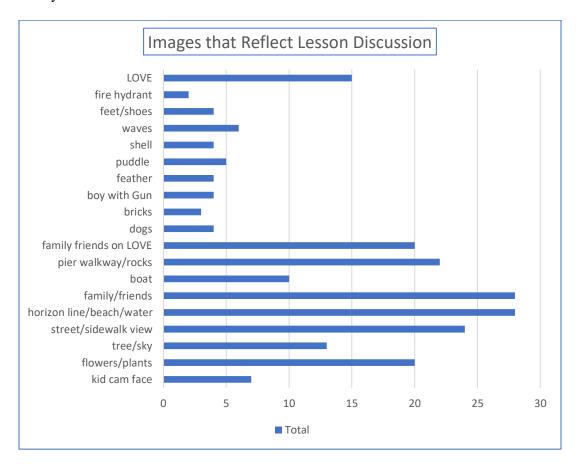


Figure 37. Participants' photograph decisions that reflect lesson discussion.

These data indicate that the lesson taught by the program director and myself were influential on the participants' photographic decisions. The next section provides some examples of images that reflect the lesson topics that were discussed in the library prior to the photoshoot and which correlate with the thematic content analysis. These images account for the influential role educators have on children's knowledge construction.

Perspective in Nature and Subject

As I walked alongside Martin towards the waterfront, he stopped because he was interested in a leafless tree against the blue sky. He took several pictures of the tree—from straight on and crouched on his knees with the camera pointed straight up to capture the tree from a different angle, as shown in Figure 38. These images helped to produce the theme from the content analysis, Pure Nature.



Figure 38. Martin's pictures of the tree.

In fact, as I analyzed the data set for perspective, I found that perspective could be seen in every participant's set of images except for one child. Another example of perspective is shown through the LOVE sign in Figure 39, which is imagery from the same child, taken at different angles. These two photographs were placed into the Built Things theme.



Figure 39. Allison's LOVE sign taken from two different perspectives.

In this example of perspective in nature, Isaiah's feather in Figure 40 is unique to the surrounding environment just like the orange leaf shown in the lesson. The reason given in the lesson for capturing the leaf was because it stuck out as different than the rest of the organic material in the environment.



Figure 40. Isaiah found a lone feather fallen on the ground.

The feather shows the same quality in its environment as the leaf in the lesson, as described by the program director. Further, Isaiah clearly crouched down to get a ground-level perspective on the feather. The feather photograph reflects images within the Pure Nature theme.

Capturing Play, Color, and Environment

During this stage of content analysis and correlation to the lesson, I noticed for the first time that one participant figured out how to make his photography, or camera filter, black and white, which reflected part of the lesson where the director showed the children two pictures of a dog—one in color and one black and white. These images were originally coded as "Kid Cam face" and "tree," and were categorized as People and Pets and Pure Nature, respectively, but they also reflect the lesson topic that focused on color versus black and white imagery. However, in the lesson, participants were not taught how to manipulate the cameras in a way that created a black and white filter. In fact, the participants of the program were prompted to use "auto mode" for this particular photo shoot. Cole opted to tinker and play with his camera functions as shown in Figure 41.



Figure 41. Cole's black and white images.

The camera Cole was given has many modes of operation, where the photographer has an array of options for modes. Specific to Cole's camera, by pressing the "Scene" button, which is next to the button that allows the photographer to view images taken, a display of 21 different shooting modes pops up on the viewer screen. The children were instructed to use "auto mode" for this day's photoshoot. However, what is evident by these pictures is that, with some playing and moving the tab through the optional shooting modes, Cole found, under "Portrait" mode, the

mode "Black and White Copy." With the influence of the example images in the lesson, the brief tutorial of how to operate the camera, and the material—the camera itself—Cole was able to make photographic decisions that were heterogenous in nature to all other images in the data set.

Upon closer inspection of Cole's heterogenous images, I recalled the two participants he stayed close with during the lesson and photography walk, Daniel and Matthew. This closeness was reflected in the photography that came from the three boys in their separate sets of images, which across all three sets, the three boys took several pictures of each other in various scenes. In fact, I found that Matthew also used the camera's different shooting modes, which is evident from the picture shown in Figure 42, as it has different coloring, a different filter than auto mode.



Figure 42. Matthew's picture shows manipulation of camera shooting modes.

As the researcher conducting walking methodology at this time, walking with others, I did not see the changed attire of this participant, nor the handling of the gun, nor the posing of the subject, nor the photographer making these photographic decisions of mode and perspective. It is unknown if it was Matthew or Cole who first chose to manipulate the shooting modes. As the researcher, what I do know is that, during the lesson, as the children were given time to play with their cameras, a child did ask about shooting mode, and I told the participants that today to stick with auto mode as they grew accustomed to the cameras. Just like the sample images of children playing in their park environment in the city, this image reflects the topic of children at play in their environment, and even the question I posed, "If there were no trees in the environment, would you be able to get a picture climbing a tree?" This picture manifests several topic qualities, yet these boys did not follow the explicit instructions, and because of that, a heterogenous representation was produced. Figure 8 tells a rich story about childhood in the rural place, on the Shore.

Rule of Thirds

Without asking the children specifically if this was a purpose in any particular image, there is a certain level of assumption when analyzing images with this lesson topic/theme in mind. However, employing the Rule of Thirds was less evident than it was with children playing with perspective. Some images did reflect the Rule of Thirds and the practice students did using the cardboard frames during the lesson to frame each other's faces while also capturing the environment. The People and Pets image presented in Figure 43 shows this in action as well as a unique angle and perspective, as this photograph was taken by Teon of another participant sitting inside the letter O of the LOVE sign.



Figure 43. Teon's practice with Rule of Thirds.⁴

In another example, the Rule of Thirds came up in a participant's attempt to capture a subject that was unique in its environment, compared to the other organic materials near it. The two pictures of the shell in Figure 44 also show how the child was playing with perspective within the theme of Pure Nature.



Figure 44. Daniel's images reflect Rule of Thirds.

These two sets of examples in this section show that it is impossible to parse out of an image, a single topic taught in the lesson. Each image that was found to reflect the lesson represented, in

⁴ The lighting of this image was brightened to make the participant's face indiscernible.

essence, the lesson as a whole. Furthermore, each image that aligned with what was taught could simultaneously reflect perspective, Rule of Thirds and the frame, subject, unique material in environment, color, play, and the discussion and suggestions posed.

Regarding the Practice and Play theme, it is a common risk when using photographic methods with children that indiscernible imagery might encompass a large portion of a data set, leaving the researcher unable to analyze or understand photographic decisions. In the case of this study, this did not present a problem. Of the 474 collected images (and video) only 10 images were indiscernible as to what was the subject. These types of images were found to be taken in a sequence images that show the photographer may have zoomed in to closely or was playing with the camera in some way in order to better understand how to manipulate it. A few of these images appear accidental or too blurry because of the participant's physical movement. Looking at the Practice and Play is important when making connections to the photography lesson taught prior to the photoshoot: the lesson was effective in teaching children the fundamentals of photography. These fundamentals included different perspective, subject, examples of content, and, how to manipulate the camera. Children were given ample time to sit with each other on the floor; each had his or her own camera in hand to play with it, as they talked to each other and begin taking test shots within this setting. Discussion, examples, modelling, and finally, play and exploration, was the format for this program and the children had success with taking photographs on this day. Indeed, these findings and examples show how adults leading learning and sensory experiences have great influence over how a child investigates place and what a child may tune into. Adults do shape the lens through which children look through and construct meaning and knowledge. However, the data that reflected the lesson experience account for half

of the total set of images, which leads to the question: *What are the other influences on children's photographic decisions and perceptions of environment represented by imagery?*

Thinking with Theory

A content analysis of the images can provide a wealth of information about the children's photographic decisions and how they chose to capture their environment, their place. A thematic analysis of the lesson that occurred prior to the photo shoot and the found alignment between the lesson topics and children's images gives insight into the influence language-driven sensory experiences have on children's actions and decisions. However, coding of content provides only a piece of these findings. The images in the data set are, too, a production of an individual's personal sensory experience in a place, in a space and time, with matter, with a camera. Forthcoming, I provide narration to juxtapose two participants to see their differences in possible perceived experiences in the space, at that time, and with their material, in a rural place.

As we began our walk towards the beachfront, Krista, a 13-year-old participant, stopped her mother and me because the lens of her camera was blurry. I looked inside her camera bag for the microfiber, which could not be found. We tried to clean the lens with a shirt sleeve, but this did not work. I tried turning the camera off and then back on again. This troubleshooting worked. Krista had been cautious on top of this set back from the get-go. She stayed back with her mother and did not walk with other children. She took ten pictures in total. Every single image was nicely aligned and straight; eight of them caught a perfectly horizontal horizon line with sun shimmering on the water as shown in Figure 45. Krista's slower walking style, her one chosen person to be with, and her small, yet perfectly aligned and stable set of imagery show caution, thought, discernment, and carefulness.



Figure 45. Krista's shimmering horizon.

In contrast, Teon, eleven years old, who took 62 pictures, epitomizes the "point and shoot" camera, where looking through his scroll of images, it is evident that he pressed the shutter at every which way his eyes turned and looked. Everything was worthy of capturing for Teon, and he moved so quickly that even his motion is captured through his imagery as can be seen in Figure 46.



Figure 46. A picture of the library setting, program participants gathered and Teon's motion. This is not to say that Teon did not also focus on the still and specific, as Figure 47 shows that he was still looking carefully for the little things.



Figure 47. Teon's focus on the details in environment.

To consider both Krista's and Teon's differences in number and type of imagery, it is possible to make a connection to the way their own senses perceive the space. Krista was cautious, calculating, disregarding all of the possible choices for photos to focus on her natural horizon. Her set of imagery was bright blue, crystalized, thoughtful. Teon's imagery was plentiful, it told a story from the moment he got his hands on his camera: who was there, where they were, where they walked, their destination, the closure of the lesson, the details of materials in the library. For Krista, quiet and thoughtful, it was the horizon and a sense of distance, expanse. Why does some matter attract some while other matter attracts others? Neither Krista nor Teon elected to write captions for their images, so what is left is the material, without the discursive in shaping new understandings of how these two children are shaped by the space and time of a particular place. Barad (2007) argues that neither the material nor the discursive precede the other. For Krista, it is impossible to say whether the discursive components of the lesson, the personal attraction to water, sun and expanse, her camera as a tool itself that made her cautious and thoughtful had greater influence on her photographic decisions. According to Barad, each of these components in that moment of space and time took on an entangled

ontology, and indeed the apparatus itself shaped the outcome. For Teon, it is still unknown if is his own bodily experience with his senses, the touch of the shutter, the perceived importance of every thing and body around him had more influence over the other in his photographic decisions, which resulted in six times more photographs than Krista. In this case of Teon, it is possible to consider his own body as the primary apparatus for his photographic decisions. Still, Barad would argue that Teon was intra-acting across a flat ontology with all the present matter, within and as part of the space and that moment in time. The difference between Krista and Teon illuminates the real material differences between sensory human bodies, with each other and with the non-human. Greene (2004) theorizes through String Theory, that at the subatomic level, the components of each and every existing atom exert different vibrational patterns based on the particle and mass. This is agential realism at the subatomic level, and the intra-action of vibrations in every cubic milli-space is emitting energy. Could it be that each individual is attracted to intra-acting with that which has a complimenting vibrational frequency? These questions about matter and space are both intricate and vast. Krista and Teon experienced the same lesson with the same group of people, and walked in the same place, yet what they seemed to perceive and thus produced was vastly different. This difference offers implications for learning and knowledge construction, which will be discussed in Chapter 6.

What is similar about Krista and Teon is that they both attend the local public elementary school, where others in the group attended private school or were homeschooled. They both asked questions about their cameras. Teon, who came early to the informational session with his mother and brother, was quick to pick up my cameras on display and play with them. Krista, whose camera was not working properly, stopped to try to figure out the camera, and ask questions of me. The children were not of affluent homes and represent the variety of races and

ethnicities and histories of the Shore, however with a tool in their hands, the conversations became focused on the tool and how it could be used properly to capture the environment in ways to their own liking. The implications of the power of the tool, when given to the child, in shaping and producing the images and narratives of the child's perceived place are evident. When children are given a tool, a material, with the specific purpose of capturing and writing a narrative about their home, then part of the focus became mastery of the tool for their own documentation and perceptions. The tool could then be used to measure angle and color and subjects within a place; as such, the everyday state of living, whether affluent or poor or somewhere in between falls from the forefront and every child participant found themselves across a flat landscape of equality. For this, the camera was a powerful assemblage of matter in the hands of youth on the Shore that has the potential to produce new narratives about these populations:

Krista was drawn to the great expanse of the Bay. On a bright, cold day she took calculated photographs that exhibited the vast horizon, lined perfectly straight from left to right. Every picture she took was filled with bright blue. Her black hair was also dyed blue at its tips! She was attracted to the way the sun shimmered upon water, as shown by this image and another of just a puddle that looked like it was covered in a layer of diamonds.

For Teon, every aspect of environment and place was a vivid sensory experience. He was the first to touch the cameras on the display and ask to play with them. As soon as he turned his camera on, he was capturing pictures of his friends, of the library, of his teachers. He was able to capture his own constant motion. Outdoors, he used the camera as a tool to investigate and document built things and organic material. His photographs show perspective of looking up, crouching down closely, and seeking interesting angles. Everything was worthy of being captured and his set of images were rich with color and variety, and his friends.

Children's Perspectives

Five children provided language to describe their imagery. I first present Cole's personally selected imagery, and following Cole are Chelsea, Allison, Diana, and Ali. These children selected images from their set and wrote accompanying captions for the purpose of making a community book. All captions in Figure labels/descriptions are written verbatim as given to me by the families and children, as such, if there is missing punctuation in the figure description it is for the reason to honor a participant's exact writing.

Cole

Cole, a 12-year-old boy who attends the local Christian private school, took 61 pictures. The following Figures 48-51 show the four images and Cole's created captions.



Figure 48. The white boat. "It was amazing to see how big the boat looked."



Figure 49. The stone under the sand. "It looks like buried treasure in a way."



Figure 50. The sailor sculpture. "It's good to appreciate art that shows local culture."



Figure 51. The waves hitting the seaweed. "It was cool seeing the collision of the waves hitting the dry seaweed."

Cole's photographs reflect the content analysis presented in this chapter in several ways. First, he selected photographs that illustrate built structures and symbols of the Shore, which was a prominent theme among the participants. The boat and the statue, built structures, indeed show how "local culture" is produced, as Cole noted in his accompanying caption with the statue of a boat captain. Secondly, Cole captured and selected photographs that align with the topics/themes of the photography lesson, which include the suggestion of capturing boats and the wave, which is similar to the small wave rolling over a child's foot near the shoreline. The visual of this was "cool" to Cole, the way waves collide with solid matter.

A difference does emerge from Cole's set, however, through a diffractive reading. Cole's close-up image of the rocks partially buried underneath the sand looked "like buried treasure," and this was a topic neither discussed nor shown in the lesson prior. The idea of "buried treasure" brings up connections to pirates and a real treasure, which aligns with his boat image and the captain sculpture, and each of these images can arguably take on Massey's (2005) concept of man taming space, just as man has tried to tame the sea for centuries. Cole's imagery speaks about the conquests of man who made it to the Shore and settled there. They had built their boats and harvested all the treasures of the place; they made it their home from traversing across the sea. The treasures of the Shore are what make life possible there, as such with this image, Cole illuminates the fact that indeed treasures *are* found amongst and beneath the grains of sand and beach grass. It is these stories of the past that transcend time through their mattering; it is Cole that narrates the material through the patterned retelling of Shore narratives of *The Captain of the Sea.* Yet, with the collision of the wave hitting the seaweed upon the shore of the Bay, Cole shows us that the sea will continue to roll in wave after wave. This can never be tamed. Moreover, Cole's image and remarks about the collision of water embody an inherent

understanding about the force and influence of the water and other matter—the water hits the dry seaweed and because of that, in that small space, both materials change from the collision of natural forces. Cole's camera became a tool with which he became entangled as he investigated these nuances of place; and Cole changed, he himself as "matter-in-the-process-of-becoming," becoming a photographer, a historian, and a scientist, seeing place in deeper layers each time he looked through his viewer and pressed the shutter, and in turn, the camera became vibrant eyes and perception (Barad, 2007, p. 179). These interactions become both the "possibilities for what can change and how it can change" and the conditions themselves that produce the change (Barad, 2007, p. 179).

Allison

Allison is a fourteen-year-old girl who traveled from further north on the Shore to attend the program. She and her sister are homeschooled. She took 37 pictures on the day of the photography program. Figures 52-55 show the four images she selected for the community book and wrote captions for.



Figure 52. The setting sun glistens among the cold water.



Figure 53. I LOVE the beach!



Figure 54. The wind blew lots of sand on the fishing pier over the winter.



Figure 55. The rocks, setting sun, and water make a beautiful scene.

Allison's horizon lines are reflections of many of the participants' images. Far more female participants captured the way the sun glistened on the water. Allison's captions all illuminate her awareness of the power of nature, and the force of the climate, the wind, the sun, the rocks—they all shaped the space from Allison's perspective. It was a cold day at the end of winter. The winter wind still blew, yet the sun was bright and warm as it is in early spring. The weather shaped Allison's descriptions, such as of the pier in Figure 26, with her caption remarking on the sand that had blown upon it by the winter winds. Allison could have written a caption that described the angle of the built wood and the way the built construction allowed her to walk upon the water out into the sea. Instead, Allison's LOVE sign caption, too, reflects the natural setting on which it was built—her interpretation of the built structure shows that it is a representation of the love for the beach.

Allison's set of pictures can be connected back to the content analysis in the way they represent the theme Pure Nature. Allison's pictures also reflect the lesson prior where suggestions for capturing images of the ocean, the pier, and the LOVE sign were spoken. The difference found in Allison's pictures was her rocks. Large rocks lining the shore of the beach by the pier were a man-made natural bulkhead to protect against erosion. The tightly woven fabric of the atoms creates a dense mass that makes up rock. The power of rock from its virtual thickness, heaviness, sheer strength against the forces of time and water and wind leads it to be used as a protective barrier against the sea. Allison finds the rocks beautiful and significant, and they are for this town on the Shore. They create a boundary between human body and human-made and non-human, and they create a fictional story that the human can tame the waters. Once humans tame the water, they can build structures alongside its shore—structures like piers, signs,

buildings, and lay the streets with concrete to walk upon with feet that will not shift and sink into the sandy earth, until the next big storm comes. Barad argued that "the point is not that time leaves its mark as it were and marches on, leaving a trail of sedimentation to witness the effects of the external forces of change...rather, the past and future are enfolded participants in matter's iterative becoming" (Barad, 2007, p. 183). Humans are made of the same matter as rock and water and skin is like the boundary of rocks along the shore, superficial (Barad, 2007), with temporality wearing it down, eroding it and taking it atom by atom, molecule by molecule, back to its origin. The rocks, setting sun, and water are a beautiful scene as there is no boundary between it and the human body.

Chelsea

Chelsea is eleven years old, and the sister of Allison. She is also homeschooled by their mother. She took 36 pictures the day of the photography program. Chelsea and her sister Allison took more pictures than any of their female peers who were participants in the study. Figures 56-59 show Chelsea's selected images and accompanying captions.



Figure 56. Who doesn't love the beach?



Figure 57. You can always find treasures at the beach.



Figure 58. The beach is beautiful anytime of year



Figure 59. It's amazing how you can find so many different patterns in nature like ripples in the sand.

Like her older sister, Chelsea selected Pure Nature images from her set of images. Her one Built Things image, like her sister, had an accompanying caption that highlighted the natural setting in which the structure was built—the beach. Chelsea's images in Figures 28-30 also reflect the lesson discussion through her selection of the LOVE sign, the beach scene, and the shell. Barad (2007) would argue, however, that it is impossible to pin the lesson as the sole influencer of Chelsea's photographic decisions. In fact, one could argue that it was the environment that influenced the photography lesson teachers' photographic decisions and their mutual planning that influenced their specific selection of examples to show. Through this analysis, the material-discursive is illuminated in a cycle of patterned stories. The discursive then allows one to understand that Chelsea perceives that finding a perfect, symmetrical spiral of a shell resting alone upon the sand is a treasure. Just as Cole perceived his rocks like buried treasure, Chelsea recognized the lone shell as a treasure. The difference between their perceptions is nuanced in the language they chose to describe. Cole's buried treasure alludes to human influence, a story of riches to be found. Chelsea's treasure is one given by nature, and simply the shell found.

Chelsea's final picture selected does fall into the theme Pure Nature, however, her finding and reflections about the ripples in the sand as patterns in nature were indeed shaped by the forces of nature and likely the tool, the camera, in her hand. The camera became a scientific tool for inspection, a microscope for perception; it influenced her to look closely at the details of the land on her walk. It shaped her ability to zoom in, look closely. In the lesson prior, I did encourage the children to not only take pictures with their newly learned photographic skills, but to also inspect their environment like scientists. This could have influenced Chelsea's finding of the ripples in the sand, however, it was the sand itself that showed these patterns to her. It was the camera that made her aware, and it was the image she took that allowed her to view the patterns after a period of time, in a separate space (her Google folder), to objectively see patterns in nature that are made over time. Each material led to final selection and written caption. This became a *sand-ripples-camera-child-teacher-viewer-time* event, as the ripple patterns in the sand, the child-adult interactions, a digital camera, and material-discursive relations tell this narrative.

Diana

Diana is a 12-year-old girl who also attends the local Christian private school. She took 23 photographs and selected four, shown in Figures 60-63, from her set to write captions for. Additionally, Diana created a collage using the LOVE sign, with an image of herself sitting on each letter. This is not included in this set per IRB protocol.



Figure 60. Sun, sky, sand!



Figure 61. The fishing pier



Figure 62. You can see really far down the street



Figure 63. A Cape Charles Mural

Barad (2007) and Haraway (2016) both note, diffraction can be used as a useful counterpoint to reflective findings. In considering both reflection and diffraction as optical phenomena (quite appropriate for visual methods), whereas "the metaphor of reflection reflects the themes of mirroring and sameness" (content analysis), diffraction is "marked by patterns of difference" (Barad, 2007, p. 71). Diana's selected set of imagery was shaped by much of the Built Things around the town. Where other females' work presented here portray the pier as a thing among the more powerful nature, Diana focused on the pier as itself, a Built Thing. Diana explains that the view of the street allows her to see far in the distance. Diana illuminates local culture through the artwork she captured, calling it simply, what it is—a mural. Indeed, much of the female participants' captured imagery that came from the photography program placed an inherent focus on the natural (Pure Nature), where male participants captured a larger set of Built Things, as shown through the content analysis data and through the images selected for the book, with captions. However, not all gendered participants fell into generalized preferences of Pure Nature versus Built Things, as such, it is important to be cautious in the categorization and association of female with the natural and organic and the human-built with male. In response to gender and feminist theory, Barad asked if a physicist's understanding of matter could help develop knew understandings about how "bodily contours are constituted through psychic processes...and how the very atoms that make up a body come to matter" (p. 208). Further, Barad (2007) quoted Butler (1990) who asked of feminist theorists who claim that gender is culturally constructed, "What is the manner or mechanism of this construction? If gender is constructed, could it be constructed differently? (Barad, 2007, p. 63). The content analysis in this chapter shows that categorization can reveal new insights about a topic under study, however, every human embodies a unique set of qualities and ways of being and attraction that cannot be

categorized, and to do so would not lead us to the best and most accurate ways of understanding learning and knowledge construction. While this study is not about gender, this aspect of the findings has implications for future research related to this project, which will be discussed in the Implication for Future Research section of chapter 6.

Ali

I close with Ali. Eleven-year-old Ali, sister of Diana, is also a student at the local Christian private school. She took 21 photographs. Ali selected the following four images and embedded her text captions into the images. Figures 64-67 present Ali's imagery and accompanying text.

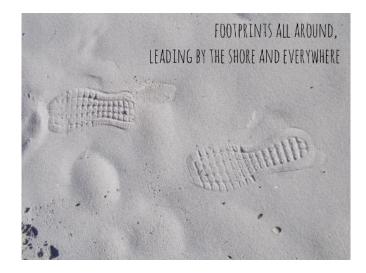


Figure 64. Footprints all around, leading by the Shore and everywhere.



Figure 65. Salty air, ocean waves. The breeze reaches out and greets my face.



Figure 66. For the beach is a beautiful and mysterious thing



Figure 67. Sandy grit inside my shoes. I've learned the ocean will choose who will be called by it

Ali's poetic personification of the power of the Shore's environment illuminates the purpose of this study. This study sought to understand how a particular place, a specific kind of environment, influences and shapes the way children learn. I theorized that the matter of a place—all that makes up its physical geography, and in turn, its history and culture—has great influence over how children construct meaning and knowledge of the world. Ali's final quote exemplifies this. The sand and grit in her shoes ground her in her place. Walking upon the sand is walking upon her home. Her home is surrounded by salty waters, and those waters, to Ali, are a living, breathing thing that greets her, chooses her, and calls to her. The countless footprints of others guide her. Her forefathers' and foremothers' treaded steps to settle this rural place and led the way by cultivating the ocean's resources, "beautiful and mysterious," making built economies, homes, places with memories and history and culture. Yet, the most powerful force for Ali is the ocean who calls for her, for you, if you seek it.

Moreover, the four elements captured through children' photography and captions strip the importance of built things. The sun-fire, the water, the wind-air, the sand-earth are produced in these captions by children, in these stories of the Shore. Bennett (2010) argues for thingpower. Barad argues for intra-action among all agentic matter. Greene (2004) posits that *all* is vibrating similarly in some way at the subatomic level. And, Massey (2005), like Greene, believes in the equality of space and time. I argue for the four elements within space and time as being the builders of geography, of history and culture, having a powerful influence over our knowledge construction, learning, meaning making. The four elements of space and time persistently shape human's ontological, epistemological, material-discursive practices. Standing in the waves of the Atlantic on Hog Island, I construct my own understanding that there is no flat ontology across me and this natural force. From human perception, from an awareness of every vibrating atom in the construction of this body, there is a deep knowing that the human cannot tame this space, but we are *of* space, the human body *is* water, air, earth, and fire, and this is where the flat ontology exists. The ocean tells me just as does the unrelenting rotations and revolutions of the heavenly earth body that is our home, making time, making space, making this place. And for those who find great importance with the built, it is the elements that provided those building materials, which includes ourselves, our own bodies built of water and earth, fire and air.

Rural children of the Shore have a deep, intrinsic understanding of these forces, as shown through their photography and captions created through Photovoice method. The research question for this chapter asked, *In what ways does engaging rural youth in participatory research using arts-based tools produce alternative discourses about living in rural places?* Engagement was produced through the library, the adult-guides prompting the children to simultaneously take on the role of artist and scientist, the cameras and the children's play, and importantly, the place. The place itself—its geography, culture, and history—engaged children in ways that produced alternative discourses about growing up rural. This is not a story of segregation or separation, poverty or affluence, test scores and adequate yearly progress. Rather, it is a rich narrative of children's intuitive understandings of the importance and goodness of their rural place.

CHAPTER 6

DISCUSSION, IMPLICATIONS, AND CONCLUSION

In this final chapter, I begin with an overview of the study purpose, which includes a review of the guiding research questions, study design, and findings. After the overview, I discuss the implications of the findings as they relate to the research questions, and importantly, how the findings speak to and for youth and learning, rural places, and place based education. Additionally, I delve into the limitations of this study, which then leads into further implications for conducting research that focuses on place. To close, I provide recommendations for areas and foci for further research needed and, additionally, recommendations for innovative and informed pedagogical practices in the field of place based education.

Overview of the Study

Every rural place is unique, shaped by particular geographies, existing resources, and the economies possible and built there. Human settlement has shaped the discursive histories of places globally and locally, and those histories continuously influence America's cultures, peoples, and local rural communities (Tieken & San Antonio, 2016). There are unique affordances of growing up in a rural place, which can positively influence children's learning experiences. Rich geographies, local histories, and small, culturally connected communities all play a role in shaping an environment ripe with specific living and learning experiences (Chetty, Kline, Hendren, & Saez, 2014). Indeed, experiences within a place shape how children perceive the world and influence how they may aspire and go forth into their future (Tieken & San Antonio, 2016).

This strength-based perspective of the rural place is consistently challenged, and perceptions of rural places, communities, families, and youth often posit a deficit perspective

(Corbett, 2016; Hebert & Beardsley, 2001; Tieken, 2016). From government structures to even advocacy organizations, a common discourse places the rural locality as one that is behind the times and/or has failing economies (Corbett, 2007; Corbett, 2016; Kannapel & DeYoung, 1999; Mette, Biddle, Congdon, Mercado, 2019; Tieken, 2016). Moreover, rural communities are often considered to be in need of economic, health, and educational assistance (Edmondson, 2003; Theobald, 1997; Tieken, 2014), with their systems and services incomparable to wealthy suburban or urban counterparts (Mette et al., 2019; Sutton & Pearson, 2002; Tieken, 2014, 2016). Because of these challenges, rural children may experience perceived low mobility (Chetty et al., 2014). While these known and stated issues are grounded in research, the positive aspects of the rural place can and do cultivate children's growth and learning. Dewey (1900, 1915, 1943) noted that children's learning is a mirror of place, and lived environments send out influential messages that shape children's becomings (Biesta, 2017). The societal and cultural environment comes to the forefront in this type of discourse, but there is also the natural, physical, and spacious that deeply influence the child. Moreover, the formal school is undoubtedly a critical form of education, but it is not the only space and place for learning. In fact, informal, experiential learning in one's lived place can have even greater impact on children (Dewey, 1938). Rural places can produce and provide unique affordances associated with these ideologies.

The purpose of this research was to first understand the interactions of history, culture, and physical geography, as related to time, space, and matter, in a rural, geographically isolated coastal place. Once a context was shaped to understand these interactions, a second purpose of this study was to examine how those interactions produce and continuously shape both formal and informal learning and meaning-making spaces and experiences for children. Topics related to geography and children's spaces and places often reflect cultural and political spaces (Holloway & Valentine, 2000). To counter and support this standing research lens, this study focused on the natural forces and material of place as a way to interpret its history, culture, and meaning-making systems. This study was grounded in Greene's (2004) and Massey's (2005) theories of spatiality, which illuminated the meaning, influence, and multiplicities of space and time. Additionally, Barad (2007) and Haraway's (2016) new materialism, and Bennett's (2010) vibrant matter brought the natural environment to the forefront and helped to shape new understandings of the influences of matter and material on youth's learning and knowledge construction. The analysis of this study displayed how the social and natural sciences, post-qualitative and traditional, can be mutually supportive discourses.

An equally important goal of this research was to understand the influences of history, culture, geography—time, space, and matter—*from and with children's perspectives* about place and lived environments. Traditional histories of the Shore, and the greater Southeast region, are speckled with static stories about children (Foreman, 1975; Whitelaw, 1968; McCartney, 2001, 2003, 2007; Rountree, 1990). Today, children's voices are becoming more prominent through the fields of childhood studies and geographies, children's literature, and politically. However, in the rural place of the Shore, children have had little opportunity to voice their perspectives, no matter their background, race, or ethnicity. Instead, children are a part of a different body of discourses fraught with dialogues describing the challenges rural youth face. As such, this research aimed to think with children rather than about children. Further, insights gathered from youth have the potential to speak to future curriculum design in both formal and informal learning spaces that heightens engagement, personal connection, and a sense of stewardship for one's own hometown and greater world (Sobel, 1996).

To summarize these three purposes, the ultimate goal of this research was to illuminate how place—created by space, time, and matter—deeply influences how humans make meaning, how perceptions about the world are shaped, and how bodies co-create a plurality of stories-sofar with the matter all around us. Through this development of environmental and natural influence, the agency in all things, spaces, and places can be illustrated. Thus, the goal was that if these concepts were captured through children's imagery and text, the children and researcher would both develop deeper understandings within their local contexts, and, as a result, have a loving interest in their shared world (Sobel, 1996). This is a core philosophy of place based education.

The questions that guided this research were:

- In what ways are physical geography, history, and culture interacting on the Eastern Shore of Virginia? (e.g., isolated peninsula, rural, coastal plains, eroded barrier islands, colonization, slavery, segregation, farming, and fishing, divide between classes)
- 2) How does this interaction produce both formal and informal learning, or meaningmaking, environments and experiences for children?
- 3) In what ways does engaging rural youth in participatory research using arts-based tools produce alternative discourses about living in rural places?

To answer these questions there were several modes of data collection. I collected local artifacts and documents such as news reports, obituaries, court records, and social media sites, all which were utilized to lay a rich context of place. I conducted physical, sensory research in the field using photo documentation, guided by a shooting script, in local towns, villages, a history museum, and a deserted barrier island. Extensive field notes were written to accompany the photo documentation which came from being in places. In addition to this field research, I collected data from a co-led children's photography program, with the program director of a local public library. Thirteen youth participants ages six to fourteen were recruited for this study through the photography program, and additionally, a museum docent who was raised in the place, was recruited for an interview. Finally, the talk given by the keynote speaker of the 2019 Kids Count Forum at the local community college was transcribed and analyzed as another important perspective of the Shore's childhood, history, culture, and geography.

The findings from these data were separated into two chapters. In Chapter 4, I presented the findings of the ethnographic field work which laid a rich context of place. The local documents, artifacts, photo documentation, and field notes were presented as interwoven narratives that shifted between present and past. Theoretical analysis was embedded within these narratives and these analyses served as pathways to connect back and speak to the guiding research questions of this study. Chapter 5 presented the children's photography program housed at a local public library. The artifacts, images, and children's captions that resulted from the photography program were analyzed using two different methods. First, I conducted a thematic content analysis to organize the volume of children's captured imagery and identify emerging themes that came from those photographs. Then, I juxtaposed those findings from the content analysis through diffractive methodology, or diffractive readings with the study's guiding theories. What follows is a deeper discussion of those findings in Chapters 4 and 5.

Discussion

The forthcoming sections are organized by each guiding question of this study. For each, I present a discussion as to how the findings in Chapters 4 and 5 speak back to each guiding question.

Guiding Question 1

The first guiding question of this study sought to find out in what ways the physical geography, history, and culture are interacting on the Shore, which is a rural peninsula in the Southeast/Mid- Atlantic region of the United States. Specific aspects of geography were considered and examined such as the physical isolation of the peninsula, its rurality, the coastal marshes and plains and eroded barrier islands that protect it from the ocean, and its farmlands. In terms of historical implications, the lasting effects of colonization, slavery, and segregation were brought to the forefront, as well as the cultural aspects of the place that have been both shaped by geography and history, which include an economy that capitalizes on the geographical resources such as farming, hunting, fishing, and outdoor water recreation such as ecotours. In the following subsections, I align the findings with each of these aspects of the guiding question; those aspects include findings that relate to the Shore's geography, history, and culture, and importantly, their entanglement with each other and time, space, and matter.

Physical Geography

The Eastern Shore is a narrow peninsula located in the Southeast/Mid-Atlantic region of the United States. The Shore experiences a temperate climate with four distinct seasons and a long growing season. The flat land is a rich earth that is readily cultivated for a variety of foods. On the east side of the peninsula, the Atlantic "Seaside," protective barrier islands stretch the peninsula's north to south length. These islands incapsulate lush marshes and bays between the mainland of the peninsula. These marshes provide abundance. That abundance comes in the form of shellfish, duck and other birds for hunting, and a wide variety of fish to eat. On the west side of the peninsula, a massive Bay reaches in every direction, carving tendrils of creeks into the land of the peninsula. At the southern-most end of the peninsula, huge bluffs created from the erosion of wind and water allow for miles of lookout towards the west. Small islands speckle this side of the peninsula too, and communities of people have resided on them for generations. This strip of land has the unique ability to count time like a clock. The sun rises from and sets upon its two horizons; currents of water ceaselessly flow like time itself. There is no taming of this space or of these elements that make up the matter of the Shore.

History

Indigenous peoples inhabited the Shore for thousands of years before the colonization of white peoples. However, these populations are now just remembered through artifacts found in plowed fields, court records, and oral and written stories passed down through the generations. Europeans first came to the Shore to make and harvest salt, and slowly, more came, as the freedom of the space and abundance of resources provided a good place to live. This peninsula once thick with pines was shaved by fires and flattened for farming, and with farming came the need for help on those farms. Those first workers were African slaves and indentured servants, and today they are immigrants, migrating up the east coast of the United States from Latin American countries, seeking agricultural work and a better life than the one left behind. As the trajectory of time has gone on, the humans that have populated the Shore have undoubtedly shifted and changed, and their interdependence is undeniable, as Bobby discussed at length. These are people who have worked off the land's resources; they were and are hunters and fishermen, living a life on the water, with the water. Others were and are farmers of the soil and of the marshes, and thus built some of the biggest economies in the United States: agriculture and aqua farming. Structures have been built and villages have popped up from south to north, north to south, along the long strip of land. Those towns and villages today show the unending

attempts to tame time and space. So many other structures, too, have been left to weather and erosion, and Earth visibly, slowly always takes back her resources.

Culture

Towns and villages at different stages of vitality, revival, and loss all embody a love for the salty seas that surround. Restaurants serve fresh catches of oysters and clams, crab and other seafood, fried chicken, corn, and the fruits of summer. The Hispanic/Latino population provides authentic Spanish cuisine. Political views vary just as the food. In some seaside villages, the Trump flag waves fresh and bright and clean against old clam processing shacks. In other places, the democratic candidates in the 2020 presidential election are posted proudly in houses' windows and alongside historic Black schools. This clear difference in political beliefs reflects the differences of culture on the Shore just as do the ethnic food options, and just as much as the physical separation between each village and town. Though, what most, if not all, have in common on the Shore is a reverence for the sea and the outdoors.

Importantly, the outdoor lifestyle is where children make meaning of the world within their own communities, living and playing on the water, on the old rural roads late into the night, learning from the generations before them about the earth and the sea. As the Shore became more settled and more widely known, it is visited by many. Being a place to purchase affordable real estate and live the life of the water and beaches has brought many, in fact sometimes, to the detriment of those who have roots there, in particular, to the children being raised in less affluent circumstances.

Rural places often have tight-knit communities and Shore communities are no different. The passing of stories onto the next generation was a critical finding in this research. The human need for language as a path to articulating, understanding, and teaching experience is evident through the stories told on the Shore. Moreover, as Greene (2020) noted, language allows humans to share plans and align intentions, which leads to coordinated action and communal force. Small communities are known to gather for the sole purpose of retaining memories and passing narrated experiences on to new generations. Moreover, reliance on the neighbor, mutual support across societal classes, and the local business are paramount factors in people's success, as told through Bobby's stories of his family. Small businesses become social hubs where folks gather and share ideas, and knowing your neighbors and the people beyond is critical for livelihood.

However, the poverty on the Shore is unmistakable. Communities of people live in areas that are—what feels like to some—nearly forgotten, not cared for, not important. These are the areas where children lack confidence and do not believe in their place, their home, and think that the only way up is to move away. There is a large sect of stakeholders who care about making continuous change, revitalization, and restoration due to these narratives influenced by the past, but there is still much work to be done. Indeed, it is possible here, where the continued interdependence within tight-knit communities continuously occurs. Still, there will always be difficulties with taming the elements, and from that need comes the need for power. Consider when you build a sandcastle at the water's edge at low tide, the water comes in and washes it away, only to leave the human to rebuild his shifting structure of sand again.

The Interactions Between Them Create *Place*. The physical geography of the Shore undoubtedly has shaped its history and culture. Massey (2005) further described the special-ness of place in the context of history and geography, stating, "what is special about place is precisely that throwntogetherness, the unavoidable challenge of negotiating the here-and-now (itself drawing on a history and a geography of thens and theres)," (p. 140), and furthermore, being with and aware of the ever-occurring negotiation between the human and non-human. Massey prompts the question while walking in place: What could be more enlivening than being "in the knowledge of the history and the geography that has made (oneself) here today" (p. 140)" The elements of any place will be, "at different times and speeds, again dispersed" (p. 141). The Shore is always changing, yet today, as in the past, the earth and waters give its resources, and the humans that reside there adapt and shape themselves and their needs around those resources. Just as the cultivated salt is in the food eaten, bodies become and manifest the salt. If the earth provides a rich space for farms, then workers are needed to seed and tend and harvest the farms. As people populated this geographical space, they settled and built it, they continue the attempt to tame it and live and thrive there. The Shore is a "sphere of the everyday, of real and valued practices, the geographical source of meaning..." (Massey, 2005, p. 5). It becomes a unique place where the people are deeply connected to the sea, and its enigmatic power, as shown through a child—Ali's—captions.

Guiding Question 2

The second guiding question posed in this study is distinctly tied to and builds upon the first, seeking to understand how the found interactions between geography, history, and culture have produced and continuously produce both formal and informal learning, or meaning-making, environments and experiences for children. Scouring local artifacts and documents and physically visiting many local places on the Shore, I found informal learning opportunities and spaces everywhere. Formal educational structures were found just as easily. Additionally, when collecting information about all the possible learning spaces, a certain type of learning space needed its own classification: the *semi*-formal learning space. Moreover, the unexpected finding that emerged was the common presence of *lost learning spaces*, which could have been informal

or formal in their thriving days. In the following subsections, I discuss the array of learning spaces found on the Shore noting the influence of geography, history, and culture on these informal and formal structures.

Informal Learning Spaces

At its very core, an informal learning space *is the place* within its setting of time and space. Every space traversed in time can present opportunities for experience and learning. The Shore, as a peopled place, invests in the opportunity for learning and play spaces for children and people. Parks are pristine and large, with an array of climbing and play materials. Playsets can be found in both yards of evident poverty and affluence. Swings hang from trees and trampolines bake in the sun. Toy vehicles decorate yards. Businesses place children's items for sale out on the street each day, and signs on electrical posts remind drivers to go slowly for child's play. Undoubtedly, the lives of children are honored here, and outdoor play is culturally, a way of life. Historically and presently, as shown through court records and the fieldwork done for this study, objects, artifacts, pets, and even hands-on experience with family business are given with love to children, as a way to prepare and situate them for the future.

Informal learning experiences are also provided through the geographical resources themselves. Living in proximity to the water and wilderness presents safe spaces for children to play freely with peers and beyond the watchful eye of a parent or family. The trees offer materials to build child-like structures and to become objects used for imaginary games. The dunes present a ride for rolling and the water allows for softer landings. Country roads and empty parking lots can become teachers of riding on wheels, safe contained spaces to play into the late evenings of summer, as Emma explained. Bobby, too, noted that this freedom of the outdoors gave him a higher sense of consciousness, a sense of being different from that of living in the city. The spaces are wide and open, yet family and community hold the child closely in the localized place.

Some communities lost their place, had to move, and are left with memories of where a post office and a school once stood. Places like the barrier island visited provided the most impactful learning experience for myself as a researcher. Where, for me, only my imagination could paint what could have once been on that deserted island—the bright blue balloon, a symbol for all the childhoods that once were in a place left behind.

Semi-Formal Learning Spaces

Semi-formal learning spaces are critical places on the island, as they serve as sites where the diverse array of ethnicities on the Shore can meet and learn together. Where formal schools can separate the population based on income and cultural differences (public vs. private and those who homeschool), semi-formal learning spaces serve as communal hubs for gathering. The museum of local history is a place for everyone from travelers passing through, residents of all ages deeply interested in the history of the Shore, students of both public and private schools up and down the peninsula through hosted field trips, and for summer migrant children. The museum is a renovated "Alms House" that illuminates the importance of the Shore's geography through its presentation of maps and the ever-changing fate of the once-inhabited various barrier islands. The museum documents the great storms that drove people inland as well as all the tools used in the past and still present by people attempting to tame the space and live richly. It is a house documenting history and culture, from dates to artifacts to food of the Shore, and it is a learning space for all. Indeed, this one museum is a production like no other of the interrelatedness of geography, history and culture, and the way those can manifest in opportunities for learning.

Another type of semi-formal learning space that was critical for this study is the local public library. There are several public libraries among Shore counties, and the libraries are connected and communal in their shared resources for youth programs and services. Specific to the library where this study took place, the program director was constantly busy planning and sustaining enrichment activities for youth in the local schools through outreach and in-house programs such as the photography program we co-led. During my extended times in the library doing research in their local history section and planning our program, parents with children frequently came and went throughout the day. Private tutors met with home schooled children, as homeschool families were frequent visitors at the library. They would stay and chat with the program director for a lingering time—everyone seemed to know the program director on a friendly level, and it was common to hear her giving extensions on due dates in a personal manner.

As for the photography program, the participants that signed up and gathered were a conglomeration of much of what the statistical demographics say of the Shore. There were white, mixed race, and Hispanic children and families. There were public school children, private school children, and children who were homeschooled by their mothers. All the children gathered as one group on the carpet on the day of our program, sitting closely, playing with their cameras together, taking pictures of each other and their surroundings. It was a disappointment when the program ceased due to the COVID-19 pandemic, as we had just begun to build a new diverse community, gathering to celebrate place.

Formal Learning Spaces

The Shore certainly does have many formal learning spaces, both public and private schools, and they are scattered all over the long peninsula. Each formal learning space has been

shaped by the population who live in the surrounding areas. For example, the Combined School on Tangier is the only school on the island, and it serves every child on the island PK through 12th grade. Only one school is needed because of the small population of children, as shown through the story of Matthew, who was the sole graduate of his 2020 class. Representative of the place and the culture of the population, Matthew's future career goals are leading him to work on the water, just as so many others of his island have done.

Other formal school structures are unique to the culture and numbers of their populations. The elite private school with the small, colorful sports stadium mirrors the small student study body, but an attention to the importance of sports and outdoor play. This was shown through the extensive grounds of green fields, lined with beautiful hanging trees. Public schools look just as attractive, which local elementary schools having identical architecture and colorful exteriors. Vast, landscaped grounds of all schools are produced by the rurality of the Shore. While beautiful and cared for inside and out, these schools also represent the persistent poverty on the Shore. A large portion of Shore public schools receive Title I status due to 50% or more of their populations qualifying for free or reduced lunch. In a State of the Schools address I attended in the fall of 2019 at a local high school, I listened to stakeholders discuss how a laundry room and closet for borrowed clothing was installed in the school for children who came to school in unwashed or old clothing. These conversations would likely not be occurring in the local private schools. As such, these formal public schools bring to light both the historical and present-day implications of poverty and the divide between classes.

Lost Learning Spaces

School closures which have resulted in this study's finding of lost learning spaces also highlight the problems with poverty and mobility on the Shore, and additionally, the history of education in the South. Budget cuts, low enrollment, and closure due to integration (desegregation) are all reasons for lost learning spaces. The formal schools that have been shut down have now become lost learning spaces, and the future of their revival or decay is unknown. A local public middle school, specifically, was shut down due to ballooning real estate prices, the result of people coming to the Shore to try to capitalize on the beautiful views, open spaces, and inexpensive home prices. Real estate purchases were not typically for the purpose of raising a family on the Shore, but instead to invest in real estate in order to resell and make a profit. Those who did stay often chose private schools rather than public and, as a result, the county did not have the means to keep the local middle school open. The school sits today as it was left. An overgrown garden in the front courtyard thrives but is overgrown. Blinds are falling halfway inside the windows, and left materials can be seen through the glass. Children were dispersed. There are no current plans to revive this brick school building that was once a place to honor the education of local Black children.

Another formal school building, built of strong brick by its own community, still stands with signs of an eel packing plant hanging and weathered on the exterior. This was once a thriving school and an animate production of progressive education measures across the South for African Americans. This study did not reveal how the families and children who attended the Rosenwald school felt about their school closure as they were moved into the local white school due to integration of the South's schools. This lost learning space ceased to be a place of learning completely, as it was used for profit, used as a space where the capitalization of the Shore's rich resources became a running business. Today, the school stands vacant just as the middle school. The front doors are ajar but chained shut. Other entryways have large boards for covering. Other entryways remain wide open. Plans are underway to revive this building to reinstate it as a community hub and place for learning. Donors are needed and are presently being sought. The fawn found on the building grounds could perhaps be an emblem of new life, rebirth of a learning space, of the restoration to come.

Learning Spaces Are Productions of Place. The learning spaces and opportunities for learning experience described in this study reflect the interaction of geography, history, and culture on the Shore. Yet before I go on, Barad's (2007) stance on representation is critical to infuse. Barad argues that "representationalism takes the notion of separation as foundation" (p. 137). Further, Barad posits that representation creates two domains: words and things, "leaving itself with the dilemma of their linkage such that knowledge is possible" (p. 137). To untether words, or knowledge, from the material world, how do these representations of learning have meaning at all? Alas, the limits of these descriptions of learning spaces in place are drawn by my own language, my own experience with the material on the Shore, and my existing epistemologies. After considering these limits, I make my attempt to argue how the learning spaces of the Shore reflect the uniqueness of the place, and are, in fact, not representations at all but, productions of its geography, history, and culture.

The physical geography itself presents the abundance of informal learning experiences possible. These experiences can be with nature itself and with peers and play. Learning experiences can be structured outings on boats and other vehicles to other places beyond the home, for exploration. The physical geography offers resources that shape the economy, and children learn by interacting with their predecessors about those economies: boating and fishing, aqua farming, and agriculture. The structures for semi-formal learning provide a cultural hub for all in open and inclusive formats, and those places are rich in their more direct teachings of Shore geography, history, and culture, as shown through the local history museum. Local public

libraries provide both informal and more formal opportunities for learning. In particular, the program director and I created a semi-formal learning experience where children were given the opportunity to experience place based education through investigation with a camera. This was done as a way to capture the place that is the Shore, the children's place, their home. And through this photography program that modelled place based education practices, the children illuminated their awareness of the power of the elements: the ocean, its treasures, the sand, the sun, and the built structures that embody humans' ever-present desire to tame space.

Guiding Question 3

The final guiding question of this study was designed to focus on the photography program implemented in the semi-formal learning space of the local public library. The photography program was meant to provide youth a platform to investigate, experience, and share their perspectives about life on the Shore. The adults prompted the children to place focus on the present environment and use their cameras as tools to closely investigate the place and all of the matter that makes up that natural and built, known place. As such, this sensory ethnography took on the qualities of participatory research. Children were actively engaged with the materials they were provided and the matter of the environment as they freely traversed a place. The last guiding question of this study sought to discover the ways that this engagement of rural youth could produce strength-based discourses about living in this coastal, rural place. Child participants did capture imagery and some created captions that did indeed lead to insightful discourses that illuminated those interactions explored in the first two guiding questions. Strength-based narratives about living on the Shore were written through this study.

Content Analysis Themes

Through the thematic content analysis process, 46 codes were identified and sorted into broader themes based on similarity among codes. The themes in broader categories became: Signs, Built Things, Street Scene and Display, People and Pets, Pure Nature, and Practice and Play. The children's imagery that produced these themes highlighted the physical geography of the Shore in vibrant ways. It was a bright, blue day on the Shore, and the photographs illustrated just how much blue fills children's sense of sight daily. The wide blue sky, the blue horizon, the blue and white houses that lined the street fill one's visual field with blue. The themes produced insight into how the geography, history, and culture interact and produce meaning and understanding of the world, for children. Moreover, the themes that emerged from the participatory work with children help to produce and represent strength-based narratives about living rural, though imagery.

It is critical in this research and in these findings to bring forth, again, the intrinsic entanglement of all things. Children, built and natural thing-power, the camera, the place, the time of day—where the sun was in the sky—these agentic influences produced the imagery captured on that one day for this portion of the study. The way each of these intra-acts with the other creates a unique and specific trajectory, a story-so-far in space and time (Barad, 2007; Massey, 2005). Greene (2004) noted the nature of matter and space through the lens of general relativity: "Matter here causes space to warp there, which causes matter over there to move, which causes space way over there to warp even more so, and so on" (p. 72). Had this occurred on another day, the results may shift; the results may be different had the sky been gray, had the temperature been hot, had a different group from different towns and villages joined, had the camera models been Canons. The specific space, time, and matter produced the findings of the content analysis, as did the geography, history, and culture of the Shore.

Reflections of the Lesson

The lesson that preceded the photography walk was reflected in the children's photography. The thematic content analysis of the lesson produced eight themes, which were Perspective in Nature, Subject, Capturing Play, Color, Environment, Rule of Thirds, Close Up, Location for Photo Shoot. I found that 50% of the children photographs showed similarity, or reflected, the lesson themes presented by the adult leaders of the program, which shows the influence that teaching has on learning, and as such, culture has on perspective and knowledge construction as teaching is a product of culture, and culture is a product of human's history and inhabitance of place, in time. Moreover, it is the geography of a place that shaped the history and culture, and, essentially, the lesson taught. Had there been no lesson prior that provided any examples of photography, nor a discussion about perspective and any of the other topics; if the children were just simply told the basics of how to use the camera, there may be a different set of data, or it may have been quite the same. The data set could be different if the children were given no instruction at all for using the cameras, and they were tasked, first, with figuring out the tool on their own, or with each other. These variations will be discussed in more detail in the Further Research section. The thematic analysis of the lesson that occurred prior to the photo shoot and the found alignment between the lesson topics and children's images gives insight into the influence language-driven sensory experiences have on children's actions and decisions. As such, if 50% of the imagery was found to align with the themes/topics of the lesson, where did the other imagery come from?

Diffractive Readings

The content analysis allowed me to organize the imagery and see patterns emerge that provided implications about how the geography, history, and culture produce and influence children's photographic decisions, perspectives, and meaning-making processes. However, coding of content provides only a piece of these findings. Moreover, the images in the data set are a production of an individual's personal sensory experience in a place, in a space and time, with matter, with a camera. The diffractive methodology and theoretical analysis allowed me to both support and challenge those thematic findings by investigating the power of the discursive and the material in teaching and learning. Diffractive methodology, employed through diffractive readings, or theoretical readings, based on Barad (2007), Greene (2004), and Massey (2005) presented an analysis that moved within and *with-out* the homogenous patterns of the content analysis.

Content analysis prompts us to consider the generalizations found when creating curriculum and learning experiences that may be rich and engaging for children. Diffractive methodology reminds that it would never be appropriate to typify any individual's learning styles or sensory experience based on any one quality. Thinking with theory and diffraction allows the researcher to read a rich narrative of the child, and investigate the influences of learning from a theoretical standpoint. In this case, those influences are across time, space, and matter. Diffractive readings showed a deep and inherent influence of time, space, and matter on children's productions of meaning. This phenomenon was shown through the images selected by the children who participated in the book-making process and the captions they wrote. These findings from diffractive readings indeed support the themes that emerged from the content analysis. The findings extend the themes in the way theory can provide a foundational reasoning behind homogenous patterns. The diffractive readings also challenge the content analysis in the way they show that it is not enough to generalize as a means to understanding in research. Diffractive readings take analysis to levels of intricacy that lead to new understandings about the nature of human learning. In essence, this is diffraction.

Strength-Based Discourses and the Power of Nature. One of the main goals of the photography program and the ethnographic research was to provoke and illuminate children's discourses and perspectives about living in a rural place, the Shore. As presented in depth in Chapters 1 and 2, the discourses surrounding rural youth and rural places is often fraught with deficits. Those deficits focus on lagging economies, poor educational systems, and persistent poverty, to name a few. This study sought to provide a platform for youth to present new, strength-based narratives about living and growing up rural. This echoes Haraway's (2016) important stance that "it matters what thoughts think thoughts. It matters what knowledges know knowledges. It matters what relations relate relations. It matters what worlds world worlds. It matters what stories tell stories" (p. 35). As such, the images and captions provided insight into the positive attributes and experiences youth have that are specifically related to living in a rural, coastal place.

The surrounding waters were found to not lead to isolation, but instead a tight-knit connectedness that was evident the day the children and their families gathered as a community in the small library. The children's insightful questions and discussion during the lesson showed the thoughtfulness and awareness they each have about their place and learning. The participant's imagery that portrayed play hunting behind a tree mixed with the quick ability to manipulate the camera settings for different filters showed ingrained cultural traditions mixed with the modern ability to navigate technology. The participants' attraction to the expanse of the water and the words "...the breeze reaches out and greets my face" indicate an awareness that transcends economy, community, and history. These narratives by children, who were participants of the photography program, explain that they are very grounded, very situated in their rural place, and it is indeed a space and a time that has shaped how they have constructed their world and their place within it. The findings of the content analysis provide an awareness, a consideration, and a starting point to approach children's place based learning, however they cannot be an endpoint for determining and tailoring instruction and learning experiences. As such, the findings from both forms of analysis can speak back to how educators can plan for rich learning experiences that deeply engage children, in particular rural children. Importantly, the findings also show how grounded rural children's learning is in the space, time, and matter of their place.

Implications for Place Based Education

Placed based education is very much a study of ecology, as its approaches are most concerned with the interrelationships between humans and their social and natural environments (Orr, 1992,1994; Sobel, 1996; Gruenewald, 2002, 2003a; Smith & Williams, 1999; Thomashow, 1996). Woodhouse and Knapp (2000) describe several characteristics of place based education, which include: (a) the content and activities emerge from the attributes of the particular place; (b) it spans disciplines; (c) it is fundamentally experiential, (d) it reflects a philosophy broader than "learning to earn", and (e) it has an ecological lens that is multigenerational, multicultural and connects self with place and community (Woodhouse & Knapp, 2000, p. 4). Other scholars have noted that place based education is, in actuality, a traditional approach to education, as human learning "once occurred within the context of specific locales" (Smith, 2002, p.586). Once schools were invented, and they proliferated, classrooms became a primary mode of

education and changed the inherent learning method that was originally grounded in students' lived experiences and phenomena happening locally. Learning has become knowledge gained through texts and presentations "rather than through experiencing full-bodied encounters with the world" (p. 586). Thus, Smith (2002) grounds place based education in Deweyan philosophy that posits the need for experiential learning outside of the classroom and in the real world. This study provides a theoretical foundation that presents the deep and elemental reasons why place based education is, in fact, an authentic form of learning.

The portion of this study that took place through the library's photography program merged participatory and visual methods to explore and illustrate the unique qualities of the Shore's children's histories and present lives through their own perspectives. Furthermore, the guiding research questions of this study and methods used to collect data illuminate the fundamental aspects of place based education. This study was place based education for myself as the researcher, and I facilitated that type of learning for youth. Children freely traversed a local space and place with guiding adults, while using digital imagery tools to document those built and natural environments. Through these methods, place based learning emerged, and the research became more than an ethnographic study of a place and the children who reside there. The study became a sight for experiential learning focused on local environments, built and natural, and the multigenerational perspectives that children had the opportunity to access and produce through their digital imagery and accompanying captions. The final artifact was a compiled book, to be given to each participant.

The findings indicated that, through the use of cameras and photography, youth's awareness of their local environment was brought to the forefront. They found reflection of their home, their place, everywhere they looked, and they placed themselves within that space, acting out their friendships and culture and connecting to matter in organic ways. They may have produced new meaning. The cameras also became a tool for investigation and prompted them to look closely at the details in the sand, the differences of color on the streets, the way that waves collide with solid material, and articulate how the wind was calling on that blustery, cold day, with a bright, white sun. Programs like this one run out of the library have potential in the formal school setting. Schools can have sets of cameras, enough for a class, where teachers can check out the set and go on expeditions in local environments: the school fields, playgrounds, parking lots. Field trips to local history museums and parks could include photography walks, where children investigate local environments through photography and, once back in the classroom, collaborate with each other to build books that talk about places visited and the experience of living in that place.

Community books, written by classmates, as mentioned above, can lead to school wide, multigenerational author's celebrations where families join to read books and be read to by children. Elders' stories of place can be shared, and new meanings can be made by youthful generations. Photography evokes the senses, particularly the sense of sight, and also the sense of being in the present moment, as each photographic decision is made. The use of photography and Photovoice in place based education practices can evoke deeply engaging, authentic learning experiences for all children.

The use of photography is only one type of visual documentation method that can be utilized in place based learning programs and participatory research with children. Drawing, map-making, and journaling are other examples used by childhood studies scholars and represent a plethora of appropriate methods to implement when working with youth. Additionally, mobile technologies provide other avenues for children's documentation of place, which allow children to make videos, movies, or podcasts. Using a variety of methods can enhance the way children's documentation of place is disseminated to the wider community and offers platforms for individual's creative preferences.

Limitations

A significant limitation of this study is the fact that the photography program at the library was only held for one session due to discontinuation as a result of COVID-19. Many of the children whose imagery were presented in this study did not have the opportunity to create captions for their imagery because of a digital divide, so their discursive perspectives are still unknown. Moreover, because the program was discontinued due to the pandemic of 2020, I was unable to conduct the semi-structured interviews I had originally planned for the Photovoice portion of data collection. The lack of face-to-face conversations surrounding children's photographic decisions and the development of a larger set of meaningful captions to accompany photographs leaves unknowns in this study. Interviews would have allowed for a more robust set of data and findings—children's narratives—which would further support the third research question of this study. Interviews would present more opportunities for children to articulate their perspectives and provide a supportive platform for the writing of new narratives of growing up rural, from their own perspectives. As such, this leads to the need for further research.

Further Research

There are several areas where further research is needed. A similar study utilizing cameras and photography that focuses on dialectical interviews between researcher and youth would be beneficial for creating deeper understandings about how children perceive and connect with place. Further, the content analysis of this study provides implications for more research related to gender differences and similarities of how males and females relate to and make meaning in place through sensory experiences. Understanding differences and similarities related to gender, intra-action with matter, and sensory perceptions would be enhanced, again, by unstructured and semi-structured interviews with children in a similar program setting.

Additionally, conducting sensory, visual methods research with children ought to span diverse populations. The participants of this study were one group of children, where the majority of them came from nearby areas close to the library. Conducting more studies like the one presented here in different rural places on the Shore and beyond would enhance understandings about the influence of geography, history, culture—space, time, and matter—on both informal and formal learning experiences that are specific to place. Similar studies conducted in different rural places may present different findings. In turn, conducting similar research in city spaces or suburban places could enhance the theoretical stances taken in this study and provide new understandings about different "types" of places, based on population.

Specific to the Shore, exploring the perspectives of migrant populations is a provocative area of study. Migrant populations have different histories than those whose families may have lived in the American South and Mid Atlantic for generations. The narratives of migrant people are critical for understanding and accepting America's changing landscape and demographics, and this can begin with offering migrant children a tool to document their experience—the camera. Moreover, all youth, especially youth living in places fraught with poverty and persistent inequalities, can benefit from research that provides place based education experiences as part of the research process. As such, the place based education research grounded in theories of spatiality and matter can further uncover the underpinnings of why experiential learning in place should be considered critical in formal education structures.

Conclusion

This study set out to illuminate the deep influence place—created by space, time, and matter—has on humans, how humans learn and make meaning, how perceptions about the world are shaped, and how we co-create our stories-so-far with the matter all around us. Through this development of environmental and natural influence, the agency in all things, spaces, and places was illustrated. Thus, the goal was that if these concepts were captured through children's imagery and text, the children and researcher would both develop deeper understandings, and the children could have deeper knowledge and understanding of place. From this deeper understanding youth can go forth as young people who are engaged in their local contexts with a loving interest in a shared world (Sobel, 1996).

Through sensory ethnography, I was able to illustrate the context of the Shore in detailed ways through the collection and theoretical analysis of local artifacts and documents, websites, an interview, interpretation of a keynote speech, and field work in physical places. The documents and interviews allowed me to narrate the stories of the Shore, and thus, present a *place* rich with history and culture, shaped by geography, space, time and matter. The photo documentation and accompanying fields notes became a place based educational experience for myself as a researcher and allowed me to illustrate the Shore in a detailed way. Analysis through both content analysis and guiding theories of spatiality and new materialism brought forth the deep influence space, time and matter have on children's perspectives. Additionally, utilizing participatory methods with children, I was able to engage youth through a local library's photography program, and begin to lay the groundwork for new narratives about living and growing up rural, as told by children through their own captured imagery and text.

The interactions between the physical geography, history, and culture of the Shore shape it as a known place to its communities. Those interactions directly influence informal, semiformal, and formal learning experiences for children, and adults. Learning experiences are largely driven by the natural environment of the Shore, and every child and adult is somehow touched by the sea, its resources, and the rich earth that is this peninsula. The photography program illustrated children's attraction to both the ocean and the built structures that make up their home. The photography program also showed how deeply entangled teaching and learning, and the material-discursive are. Through this program, children gave insight into how they perceive their surroundings, as shown through their photographic decisions, and the captured imagery connects back to and reflects the ethnographic research conducted in order to lay context of the place, through a theoretical lens. Furthermore, the program illuminated how children connect with the natural and have an intrinsic intelligibility about the power of nature and its influences. There is great potential for future programs such as this one to be put into practice across the continuum of informal to formal learning spaces and places.

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APPENDICES

Appendix A

Parental or Guardian Permission Form for Research Involving Children/Youth

OLD DOMINION UNIVERSITY

Project Title:

Growing Up Rural: A Participatory Ethnography of Youth Perspectives on Time, Space, and Place

Your permission is being sought to have your child participate in this study. The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. Please read the following information carefully before you decide whether or not to give your permission.

Researchers: Rebecca Tilhou and Kristine Sunday, Ph.D. (faculty advisor), Old Dominion University, Darden College of Education

Description of Research Study: The purpose of this study is to help us understand how a place's natural and outdoor learning environments influences and shapes the ways children make meaning and learn. A goal of this study is to make a contribution to the growing body of research about place based education. Place based education focuses on human relationships with local and surrounding places and aims to foster children's deep connections to place and community.

We are seeking youth who are residents of the Eastern Shore of Virginia to capture and tell about their environments in this place in a multi-media format that include photography, text, and drawings. The data collected from this study has the possibility to inform future educational curriculum design, in particular, educational curricula that is specific to place based education in rural places.

If you say YES to permitting your child to participate in the study, your child's participation will consist of one one-on-one audio-recorded interview to last for approximately 30 minutes at the Cape Charles Memorial Library in Cape Charles, Northampton County. I will ask about the images, text, and drawings your child captured and created about environments. I will also join children who are participating in the study on the walks they go on to take digital images, while supervised by the program director and any accompanying parents, to observe and take notes about the environments and the children's photographic decisions. These walks may take one to two hours. Lastly, I would like to make a copy of your child's final product of the photography program—the book—as an artifact for my study. You and your child may elect to participate in any one, two, or all three of these (observations, interview, and/or copied photo book).

Criteria for exclusion: We are seeking youth who are residents of the Eastern Shore of Virginia.

Discomforts/Risks and Benefits: The discomforts in this study are minimal (i.e., no greater than those ordinarily encountered in daily life when new digital tools are used and there is a learning curve to understanding new technologies). The risks in this study are minimal, related to confidentiality and anonymity.

To protect the release of confidential information, the researcher will keep all data in a password protected digital folder only accessible to the researcher. Participants will be offered the option of selecting their own pseudonym. Any manuscripts or presentations that come out of this research will use pseudonyms. No images with children's faces will be used unless requested by you and your child.

There are no direct benefits. A potential benefit for children who participate is their perspectives may one day contribute to place based education practices for future school curricula. During the research process, youth participants will have the opportunity to become part of a community of young researchers and experience the research process. Lastly, youth participants can opt to create a pseudonym for him or herself, which can be a fun and engaging part of creating narratives.

Costs and Payments: The researchers are unable to give you any payment for participating in this study.

New Information: If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

Statement of confidentiality: All records are kept confidential and will be available only to the researcher. If the results of this study are published, the data will be presented in a manner that does not identify children or families or specific places. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

Voluntary participation and withdrawal from project: Your child's participation is voluntary. We also ask that you read this form or the child assent form to your child and inform your child that participation is voluntary. At the time of the study, your child will once again be reminded of this by the researcher. Additionally, your child may discontinue participation at any time.

Compensation for Illness or Injury: If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm, injury, or illness arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Kristine Sunday at <u>ksunday@odu.edu</u>, Dr. Tancy Vandecar-Burdin the current IRB chair at 757-683-3802 at Old Dominion University, or the Old Dominion University Office of Research at 757-683-3460 who will be glad to review the matter with you.

Voluntary Consent: By signing this form, you are indicating that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them: Rebecca Tilhou: <u>rtilhou@odu.edu</u>

Kristine Sunday: <u>ksunday@odu.edu</u>

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. Tancy Vandecar-Burdin, the current IRB chair, at 757-683-3802, or the Old Dominion University Office of Research, at 757-683-3460.

If at any time you feel pressured to participate, or have any questions about your rights or this form, you may call Dr. Tancy Vandecar-Burdin, the current IRB chair, at 757-683-3802, or the Old Dominion University Office of Research, at 757-683-3460. And importantly, by signing below, you are telling the researcher YES, that you and your child agree that your child will participate in this study. The researcher should give you a copy of this form for your records.

I, the parent or guardian of ______, a minor _____ years of age, permit his/her participation in a program of research named above and being conducted by Rebecca Tilhou and Dr. Kristine Sunday.

Signature of Parent or Guardian

Date

Please print your name here.

*For children under the age of seven, verbal assent from your child is permissible.

*A child assent form is available that presents the study in age-appropriate language for younger children.

Investigator's Statement:

I have explained to this child and parent or guardian the nature and purpose of this research, including the risks, benefits, and rights of voluntary participation. I have not pressured or presented this research in a false manner. I am aware of my obligations when working with children, and people. I have answered questions and have encouraged him/her to ask additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

Investigator's Signature	
Investigator's printed name	Date

Appendix B Child Assent Form Growing Up on The Shore Study

My name is Rebecca Tilhou. I work at Old Dominion University in Norfolk, Virginia.

I am asking you to take part in a research study because I am trying to learn more about how environments on the Shore help you learn. I want to learn about the outdoor environments where you live, play and learn, and understand what they mean to you.

If you agree, I will join you and others on the walks you go on to take pictures, and I will record observations. I will ask you to have an interview with me. In the interview, I will ask you to tell me about the pictures you took and the captions you made to go with your pictures. Our interview will be no longer than 30 minutes. You may create a name for yourself for the study. You will also be asked if I can make a copy of your whole book with all of your pictures and captions as an artifact for my study. You may choose to do participate in the outdoor observations, the interview, and have your photo book copied, or you may choose to participate in just one or two of these. You do not have to participate in all of them.

You do not have to be in this study. You still can do the photography program and use all of the digital tools provided. Even if you start, you can stop later if you want. You may ask questions about the study.

If you decide to be in the study, I will not tell anyone else what you say or do in the study. Even if your parents or teachers ask, I will not tell them about what you say or do in the study.

Signing here means that you have read this form or have had it read to you and that you are willing to be in this study.

Signature of participant

Participant's printed name

Signature of investigator

Date_____

*For children under the age of seven, verbal assent from child participant is permissible.

Appendix C Adult Consent Form to Participate in an Interview

OLD DOMINION UNIVERSITY

Project Title:

Growing Up Rural: A Participatory Ethnography of Youth Perspectives on Time, Space, and Place

Your consent is being sought to participate in this study. The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. Please read the following information carefully before you decide whether or not you wish to participate.

Researchers: Rebecca Tilhou and Kristine Sunday, Ph.D. (faculty advisor), Old Dominion University

Description of Research Study: The purpose of this study is to help us understand how a place's natural and outdoor learning environments influences and shapes the ways children make meaning and learn. A goal of this study is to make a contribution to the growing body of research about place based education. Place based education focuses on human relationships with local and surrounding places and aims to foster children's deep connections to place and community.

We are seeking adults who are residents of the Eastern Shore of Virginia to tell their stories about this place. Stories may be from one's own childhood or present-day experiences. The data collected from this study has the possibility to inform future educational curriculum design, in particular, educational curricula that is specific to place based education in rural places.

If you say YES, then your participation will consist of one interview to last for approximately 30 to 45 minutes via email or video or audio call. I will ask you about your own experiences growing up on the Shore and/or present-day experiences living on the Shore, with particular attention to learning in formal and informal settings. Approximately 5 adult participants will be asked to participate in this study.

Criteria for exclusion: We are seeking adults who are residents of the Eastern Shore of Virginia.

Discomforts/Risks and Benefits: The discomforts in this study are minimal (i.e., no greater than those ordinarily encountered in daily life). The risks in this study are minimal, related to confidentiality and anonymity. To protect the release of confidential information, the researcher will keep all data in a password protected digital folder only accessible to the researcher. You will be offered the option of selecting a pseudonym. Any manuscripts or presentations that come out of this research will use pseudonyms.

There are no direct benefits. A potential benefit from participating in the study is the contribution stories and perspectives can make to the growing body of research about rural places and place based education practices that engage children in learning about the environment and becoming stewards of their community.

Costs and Payments: The researchers are unable to give you any payment for participating in this study.

New Information: If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

Statement of confidentiality: All records are kept confidential and will be available only to the researcher. If the results of this study are published, the data will be presented in a manner that does not identify children or families or specific places. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

Voluntary participation and withdrawal from project: Your participation is voluntary. It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study -- at any time.

Compensation for Illness or Injury: If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm, injury, or illness arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Kristine Sunday at <u>ksunday@odu.edu</u>, Dr. Tancy Vandecar-Burdin the current IRB chair at 757-683-3802 at Old Dominion University, or the Old Dominion University Office of Research at 757-683-3460 who will be glad to review the matter with you.

Voluntary Consent: By signing this form, you are indicating that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

Rebecca Tilhou: <u>rtilhou@odu.edu</u> Kristine Sunday: <u>ksunday@odu.edu</u>

If at any time you feel pressured to participate, or have any questions about your rights or this form, you may call Dr. Tancy Vandecar-Burdin, the current IRB chair, at 757-683-3802, or the Old Dominion University Office of Research, at 757-683-3460. And importantly, by signing below, you are telling the researcher YES, that you to participate in this study. The researcher should give you a copy of this form for your records.

Signature of Participant	Date
Please print your name here.	

Investigator's Statement:

I have explained to this participant the nature and purpose of this research, including the risks, benefits, and rights of voluntary participation. I have not pressured or presented this research in a false manner. I am aware of my obligations when working with people. I have answered questions and have encouraged him/her to ask additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

Investigator's Signature	
Investigator's printed name	Date

Appendix D

Shooting Script

The shooting script was written in the form of laying out the research question and developing subquestions that prescribed specific foci:

Research question 1: In what ways are physical geography, history, and culture interacting on the Eastern Shore of Virginia? (e.g. isolated peninsula, rural, coastal plains, eroded barrier islands, colonization, slavery, segregation, farming and fishing, divide between classes) Sub questions to focus investigation of first research question:
 What are the characteristics of the physical geography?

-How is history evident visually through human structures and natural structures? -What evidence is there of people and built culture? How are different cultures visually evident?

-What role do natural resources play in creating a shared culture?

- How does this interaction produce both formal and informal learning, or meaningmaking, environments and experiences for children? Sub questions to focus investigation of first research question:
 - What do school buildings look like and what types of messages are displayed on their billboards? Church billboards? Restaurants? Grocery Stores?
 - What evidence is there of children in natural environments?
 - What are the children doing in natural environments?

Appendix E

Observation/Field Note Criteria

Walford's (2009) interview study with four ethnographers explored the practice of observation and writing fieldnotes, and this will be used as a guide for my study. Fieldnotes are quick notes jotted down in a notebook to record observations, where later the researcher can return to those quick notes and elaborate upon them in a more extensive account. This quote form Walford's (2009) study describes how I intend to practice observing and taking fieldnotes:

So what I wrote in these little pocket books were just shorthand notes of quick incidents written down, broadly, a couple of sentences really. So for a quarter of an hour stretch there may be about three or four pages - just of two sentences - somebody playing with somebody, somebody chasing someone else and so on. I would then use these to write up more detained notes in the evening. Given the amount of things going on during a typical school day it's amazing how much you'd forget if you didn't keep a running record like this to remind you. (p. 120)

During walks with children who are taking photographs of environments, I will use a small notebook to record observations. Main points to be recorded are:

- Time and date
- Current weather (skies, wind, moisture, temperature)
- Location
- Who is present (which participants)
- Environments chosen to photograph
- Collaborative process between children
- Interaction with digital tool (camera)
- Possible influences of environments in shaping photographic decisions
- Favored environments/outlier decisions for photographing environments
- Instances of interaction between children with each other and children with environment

Reference:

Walford, G. (2009). The practice of writing ethnographic fieldnotes. *Ethnography and Education*, (4), 2, 117-130.

Appendix F

Saturday, March 7 Agenda

Prep: 1) Display all brought images; 2) the day's agenda, 3) printed visuals of camera; 3) Rebecca's research questions- generalized

- 1. Gather children in a circle if possible or situate as space allows. Show them the day's agenda which I will have written out already on butcher paper and displayed- discuss sequence of the day's meeting, activities, and purpose.
- 2. Go over names and introductions.
- 3. Rebecca will explain that she is a teacher- yes- but also a researcher. Ask them what they think it means to be a researcher and a scientist. Tell them what I am researching. Rebecca will explain what it means to be a researcher and a scientist with children. We are "CO-RESEARCHERS." We will co-research using a special tool- what is it? Camera and digital imagery! (and also drawings, mapping, writing), so we need to learn how to do it well.
- 4. Begin discussion about how to capture powerful images, program director leads:
 - Discussion about perspective, subject of image, and color; program director provides examples from of her own photograph
 - This leads us to discussing the frame. Use pre-made cardboard frames and hold them up to sample images, but askew, then centered. Have some volunteers come up and hold frames in front of them, but askew and then centered. Possibly bring up a generalized explanation of the rule of thirds. Discuss how the frame shapes how you view the picture and a how you interpret its meaning, and how you enjoy looking at it. Sharon will lead a discussion on perspective.
- 5. Introduce photography tools:
 - Decide on the rules for using the cameras and write the rules down on butcher paper.
 - SD cards- Explain its purpose and importance. Show where it is in the cameras and how it can be removed and inserted.
 - Pass out cameras. Go over the parts, features, etc. Allow them to take a few test pics right there, noticing frame and perspective. Notice how still their hands must be to get a clear picture.
- 6. Decide where they would like to go based on what is important, make a list, and vote on places.
- 7. Go out in town for first photo session.

Appendix G

Dialogue Criteria/Prompts for Semi-structured Interviews with Shore Adults

Were you raised on the Shore?
How long have you lived on the Shore?
Could you tell me about childhood here on the Shore?
What was school like when you were a child? What is school like for your children?
What sorts of outdoor activities did you do?
What kinds of games did you play?
What kind of work did your parents do?
What was important to your family and community?
Did you travel much? What kinds of places did you travel to?
What did you know about this history of the Shore?

Rebecca C. Tilhou

M.A. Ed. and Doctoral Candidate Old Dominion University 4301 Hampton Blvd. Norfolk, VA, 23529 rtilhou@odu.edu

2255 Kendall Street Virginia Beach, VA 23451 (757) 818-5449 rebekannetilhou@gmail.com

Education

Ph.D., Curriculum and Instruction May 2021 Old Dominion University, Norfolk, VA Dissertation: Growing Up Rural: A Sensory Ethnography of Rural Youth Perspectives on Time, Space, and Place Chair: Kristine Sunday

M.A. Ed., Elementary Education July 2004 College of William and Mary, Williamsburg, VA Teaching licensure: Postgraduate Professional License: Elementary Education K-6 Commonwealth of Virginia, Expires: June 30, 2030

B.A., English; Minor: Communications Old Dominion University, Norfolk, VA

Academic History

Graduate Teaching Assistant for Teaching and Learning, Old
Dominion University
Graduate Research Assistant for the Virginia Early Childhood
Policy Center Old Dominion University
Consulting Evaluator for Practicum Students, ODU
Research Assistant for independent research projects
Research Review Intern. United States Agency for International
Development (USAID), mEducation Alliance

Teaching

Courses Taught:

Instructor of Record TLED 337 Literature for Young Children Spring 2021

May 2003

Old Dominion University, Norfolk, VA

Instructor of Record TLED 492 Integrating Mathematics and Science Across the PreK-3 Curriculum Old Dominion University, Norfolk, VA	Spring 2021
Instructor of Record TLED 328 Observation and Assessment Methods in Early Childhood Education Old Dominion University, Norfolk, VA	Fall 2020
Instructor of Record TLED 338 Integrated Methods and Curriculum in Early Childhood Education Old Dominion University, Norfolk, VA	Fall 2020
Instructor of Record TLED 432 Developing Instructional Strategies PreK-6: Language Arts Old Dominion University, Norfolk, VA	Summer 2020
Instructor of Record TLED 492 Integrating Mathematics and Science Across the PreK-3 Curriculum Old Dominion University, Norfolk, VA	Spring 2020
Teaching Assistant TLED 338 Integrated Methods and Curriculum in Early Childhood Education Old Dominion University, Norfolk, VA	Fall 2019

Publications

Refereed Journals

Tilhou, R. (2020). The morning meeting: Fostering a participatory democracy begins with youth in public education. *Democracy & Education Journal*, 28(2), 1-11. https://democracyeducationjournal.org/home/vol28/iss2/5/

Tilhou, R., Eckhoff, A., & Rose, B. (2020). A Collective Impact Organization for Early Childhood: Increasing Access to Quality Care by Uniting Community Sectors. *Early Childhood Education Journal*.

Tilhou, R. (2019). Contemporary homeschool models and the values and beliefs of home educator associations: A systematic review. *Journal of School Choice: International Research and Reform, 13*(2), DOI: <u>10.1080/15582159.2019.1616992</u>

Tilhou, R., Rose, B., Eckhoff, A., & Glasgow, J. (2018). Building Partnerships: The role of nonprofit organizations in supporting education diplomacy in early childhood. *Childhood Education*, *94*(3), 84-89.

Reports and other Creative Works

Tilhou, R., & Eckhoff, A. (2020). Early Childhood in Rural Virginia: Challenges, Affordances, and Implications for Increased Access to Services. Old Dominion University, Virginia Early Childhood Policy Center (VECPC). <u>https://www.odu.edu/content/dam/odu/col-</u> dept/vecpc/docs/rural-childhood-report-december2020.pdf

Tilhou, R. (in press). Embedding Knowledge Transfer in Digital Citizen Engagement in South Africa: Developing Digital Literacy. MEDUCATION ALLIANCE, Washington DC.

Tilhou, R. (2020). New Research Initiative by Dr. Khitam Shraim and Colleagues in Palestine. MEDUCATION ALLIANCE, Washington DC. <u>http://ccm.xzw.mybluehost.me/research-spotlight-1/</u>

Tilhou, R. (in press). Digital Natives Still Need Intentional Digital Skills in the 4IR: Comparing the General and ICT Self-Efficacy of South African Youth. MEDUCATION ALLIANCE, Washington DC.

Eckhoff, A., Goodman-Scott, E., & Tilhou, R. (2019). Are Lockdown Drills in Virginia's Early Childhood Classrooms the Only Answer to School Safety? Policy, Recommendations, and What Research Supports. Old Dominion University, Virginia Early Childhood Policy Center (VECPC). <u>https://www.odu.edu/content/dam/odu/col-dept/education/docs/vecpc-policy-brieflockdown-drills.pdf</u>

Eckhoff, A., Tilhou, R., Austin, N., & John, R. (2019). Public School Discipline Policies and Practices: Implications for Early Childhood Classrooms in Virginia. Old Dominion University, Virginia Early Childhood Policy Center (VECPC). <u>https://www.odu.edu/content/dam/odu/col-dept/education/docs/vecpc-public-school-discipline-policies-practices.pdf</u>

Tilhou, R., & Eckhoff, A. (2018). Violence in the Lives of Virginia's Children: Impacts and Implications. Old Dominion University, Virginia Early Childhood Policy Center (VECPC). https://www.odu.edu/content/dam/odu/col-dept/vecpc/docs/violence-in-the-lives-of-virginias-children.pdf

Tilhou, R. (2018). Yoga in the classroom slows down students for increased success: The yoga brain break. *Yoga Setu Newsletter*, 6(1). <u>https://www.yogasetu.org/yoga-in-education-2/</u>

John, R., Tilhou, R., & Eckhoff, A. (2017). Refugee Resettlement in Virginia: A Spotlight on Resources and Services in Virginia. Old Dominion University, Virginia Early Childhood Policy Center (VECPC). https://www.odu.edu/content/dam/odu/coldept/vecpc/docs/refugee-resettlement-in-virginia-a-spotlight-on-services-and-resourcesin-virginia.pdf

Eckhoff, A., Baker, P., Faulkner, D., John, R., Tilhou, R. (2017). Child Maltreatment in Virginia: Support for Further Advocacy Efforts. Old Dominion University; Virginia Early Childhood Policy Center (VECPC). https://www.odu.edu/content/dam/odu/coldept/education/docs/vecpc-child-maltreatment10_17-1.pdf

Book Chapters

Taylor, V., Tilhou, R., & Crompton, H. (2020). Computational thinking and coding across content areas to develop digital skills. In S. Yu, M. Ally, & A. Tsinakos (Eds.), *Emerging technologies and pedagogies in the curriculum*. New York, NY: Springer.

Tilhou, R., Taylor, V., & Crompton, H. (2020). 3D virtual reality in K-12 education: A systematic review. In S. Yu, M. Ally, & A. Tsinakos (Eds.), *Emerging technologies and pedagogies in the curriculum*. New York, NY: Springer.

Presentations

Tilhou, R. (2021). The Morning Meeting: Fostering a participatory democracy begins with youth in public education. Paper accepted, American Educational Research Association, Division B - Curriculum Studies/Division B - Section 4: Policies and the Politics of Curriculum. 2021 Virtual AERA Annual Meeting.

Tilhou, R. (2021). Connecting to local environments. Abstract accepted as a paper, Child in the City World Conference. Dublin, Ireland.

Tilhou, R. (2020). Growing up rural: A participatory ethnography of rural youth perspectives on time, space, and place. Proposal accepted, National Congress on Rural Education in Canada. Saskatoon, Saskatchewan. *cancelled due to COVID-19 pandemic

Tilhou, R. (2020). Growing up rural: A participatory ethnography of rural youth perspectives on time, space, and place. Proposal accepted for poster session, American Educational Research Association, Division D Measurement and Research Methodology SIG, Graduate Student In-Progress Research Gala. San Francisco, CA. *cancelled due to COVID-19 pandemic

Tilhou, R., Eckhoff, A, & Rose, B. (2020). A Collective Impact Organization for Early Childhood: Increasing Access to Quality Care by Uniting Community Sectors. Paper accepted, American Educational Research Association, Early Education and Child Development SIG. San Francisco, CA. *cancelled due to COVID-19 pandemic

Tilhou, R. (2019). Invited Poster Presentation, *Violence in the lives of Virginia's children: Impacts and implications* for the Kids Count Forum, Eastern Shore Workforce Development Center at Eastern Shore Community College, Northampton County, VA.

Taylor, V., & Tilhou, R. (2019). Engaging Students in Computational Thinking Across Content Areas. Paper accepted, Connected Learning Summit. University of California, Irvine, CA.

Invited Talks

Panelist, <i>Emerging Technologies and Pedagogies in the Curriculum,</i> <i>Impact on Education in the Post-COVID-19 World</i> Commonwealth of Learning Webinar Series: Responding to COVID-19 and Beyond	June 2020
Discussant, <i>Doctoral Student Welcome Panel</i> Old Dominion University	August 2019
Guest Lecturer, <i>Components of the lesson plan and content integration</i> Integrating Literacy and Social Studies Pre-K- grade 3 Old Dominion University	May 2018
Invited poetry reading, <i>Courtyard Path</i> , Principal's retirement ceremony Luxford Elementary, Virginia Beach, VA	June 2016
Invited poetry reading, <i>The Year of Relationships</i> , End of year staff meeting Luxford Elementary, Virginia Beach, VA	June 2012
Grants and Awards	
\$50,000 Spencer Grant for qualitative study: Elementary School Personnel Perceptions and Experiences with School Lockdown Drills, Role: GA	2019
Travel Grant from Darden School of Education, C&I Department	2019
Awarded Peggy Woofter Hull Scholarship	2019
Awarded membership of Society for Collegiate Leadership & Achievement	2019
Transitions Abroad.com Expatriate Writing Contest 2 nd Place Winner for essay, "Essence of Japan: Moving and Living in Tokyo"	2007
Awarded membership of Kappa Delta Pi International Education Honor Society at The College of William and Mary	2004
Awarded membership of The National Society of Collegiate Scholars at the College of William and Mary	2004
Service	

Professional Organizations

American Association of Colleges for Teacher Education (AACTE)

American Educational Research Association (AERA) Social Context in Education Special Interest Group (SIG) - Education and Place, Space, Time Charter Schools and School Choice SIG Educational Change SIG Rural Education SIG

Service to the Field

Peer reviewer, International Journal of Education and the Arts	April 2020- present
Peer reviewer, Journal of Science Learning	March 2020- present
Candidate search for Associate Dean of Teacher Services Old Dominion University Darden College of Education And Professional Studies: Campus tour attendee	November 2019
Peer Reviewer: American Educational Research Association Charters and School Choice Special Interest Group	August 2019
Candidate search for Visiting Assistant Professor Old Dominion University Darden College of Education and Professional Studies: Interview attendee and survey participant	June 2019

Offer to Serve: Publicity and Recruitment Team for College Composition and Communication regional conference May 2019, Old Dominion University

Professional Employment

Commonwealth of Virginia Postgraduate Professional Teaching License Pk-6: Valid July 1, 2020- June 30, 2030

2017-2019	SOL tutor, grades 3-5, Virginia Beach City Public Schools, VA
2014-2017	Second grade elementary teacher, Virginia Beach City Public
	Schools, VA
2013-2014	Phonological Awareness and Literacy Screening (PALS) Reading
	teacher, second grade, Virginia Beach City Public Schools, VA
2012-2013	Kindergarten enrichment teacher, Francis Asbury Preschool,
	Virginia Beach, VA
2009- 2012	Kindergarten elementary teacher, Virginia Beach City Public
	Schools, VA
2007- 2008	Fourth grade elementary teacher, Virginia Beach City Public
	Schools, VA

2006- 2007	Fifth grade elementary teacher, Aoba-Japan International School,
	Tokyo, Japan
2004-2006	Fifth grade elementary teacher, Virginia Beach City Public
	Schools, VA

Community Service and Volunteer Roles with Youth

2019-2020	Community service club for third through fifth grade students, Virginia
	Beach, VA
2019-2020	Robotics STEM club assistant, fourth and fifth grade students, Virginia
	Beach, VA
2017-2020	Youth girls club soccer coach, recreational and advanced travel league
September 2019	Led local fundraiser for hurricane victims in Bahamas, and delivered
	donations to Nassau, Bahamas Red Cross