Peer Culture of Block Play in an Early Childhood Classroom

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Hey, Mom and Dad!
Look! I did it! Am I your favorite now?
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ABSTRACT

This is an ethnographic study of peer culture in the block play area of an early childhood classroom. Researchers have continued to position block play as an essential activity in early childhood classrooms. William Corsaro’s (1985, 1990, 1992, 2003, 2020) work on peer culture in young children and theory of interpretive reproduction is the framework that guided the methods and theoretical lens of this study. I was a participant-observer, using an “atypical adult” technique, in the block play area in a 4-5-year-old classroom with 22 children during a full school year. The children navigated how to build and play socially with peers, while also trying to have control over their own structure and ideas. Data collection utilized video and audio recording observation sessions, followed by the creation of field notes synthesized from the recordings. Analytic methods were guided by Emerson et al. (2011) and included a two-phase process to categorize, find themes, and identify patterns. The three main findings of this study were about (a) the strategies and experiences of children joining, or being joined, during play, (b) how children navigated the complexities of trying to build together socially while still having control over their play, and (c) the types of friendships developed and fortified during block play. All of the findings involved identification of cultural routines, which were produced and reproduced by children, and guided behavior and interactions. The physical blocks and structures were found to play a key role in children’s peer culture. Children can make the blocks be anything, and they do. Blocks became ships, pizzas, lasers, and more. Blocks do not on their own turn into objects; children make that happen collectively with each other. Children are taking
both the blocks and the pedagogical theories behind them and making it all their own. Children have collective agency to manipulate the world around them.
CHAPTER ONE

INTRODUCTION

There is something so visually pleasing about wooden unit blocks. The natural wood color and smooth finish, combined with the perfectly proportioned sizes, allows for the creation of structures that are limited only by the bounds of imagination. Within the simplicity of wooden unit blocks are the potential for creations of intricate complexities (see Figure 1). I am intrigued by watching the structures take form, but also the interactions happening between children while building. The negotiations over supplies or space that I have witnessed occurring in the block play area are impressive and complex. In the space of the block play area, children are able to have the agency and voice to express their thoughts and make decisions about how the activity unfolds. They have the power to be experts as they create structures conceptualized together, in their own minds.

Figure 1. Wooden Unit Block Structure
Wooden unit blocks are not a new or novel toy. Caroline Pratt created wooden unit blocks in the early 1900’s. Even though wooden unit blocks are considered a staple in early childhood classrooms, researchers are still continuing to study the value of block play in early childhood classrooms. This research has been important in securing wooden unit blocks as a strongly encouraged, if not required, play material in early childhood classrooms in the United States. Demonstrating the strong correlation between block play and goals for development for young children has paved the way for a continued examination of the activity.

The body of block play literature is the premise for identifying the block play area as an ideal location to study the culture of interactions between children. All block play literature has identified something exceptional occurring for children’s development while engaged in this space and activity. While teachers may have influence over the rules of the space, set up, and materials, the block play area is highly concentrated with peer-to-peer interactions and influence. Block play literature is an important backdrop for examining peer culture in the block play area. There is a rich history of block play in early childhood classrooms and research on the value of utilizing block play, which is central contextual information for the significance of the space and materials. As I will show, although there is a fair amount of literature on how block play has a role in a child’s developmental trajectory, including social development, I want to explore block play with a cultural focus; seemingly simple peer to peer interactions, with a simple type of toy, that are so much more through shared meaning.

**Peer Culture Through an Interpretive Reproduction Approach**

The theoretical framework for peer culture of young children comes from sociologist William Corsaro. While there was bountiful research on peer culture for adolescents, Corsaro found a gap when it came to studying peer culture with young children. Corsaro’s
conceptualization of peer culture is within the context of an interpretive reproduction paradigm. The interpretive reproduction paradigm was an advancement of the constructivist paradigm. The constructivist paradigm includes some of the most notable child development theorists, such as Jean Piaget and Lev Vygotsky. Literature on block play is virtually all from a constructivist paradigm. Exploring peer culture during block play with an interpretive reproduction paradigm would add a new frontier to the body of research.

**Advancing the Constructivist Paradigm**

Theories from a constructivist paradigm are believed to have developed as a reaction to a behaviorist paradigm of child development (Corsaro, 1985). Behaviorists viewed development in terms of adult conditioning of children’s behavior. In this perspective, adults shape children unidirectionally. The new lens the constructivist paradigm added to the study of child development was to recognize the child’s active role in their own development (Corsaro, 1985; Corsaro, 1992).

Piaget and Vygotsky are two of the most recognized and influential theorists classified as constructivists. Both theorists believed that children co-construct their development. However, some would say that within the constructivist paradigm, Piaget and Vygotsky are at opposite ends of the spectrum in terms of the source of the co-construction of cognitive development and behavior. Piaget’s theoretical perspective is that children learn from observation and interaction with objects, while Vygotsky places the importance on learning from social interactions.

Piaget saw development as a series of stages (Flavell, 1963). He believed that younger children’s cognition was qualitatively different than older children. Meaning, the way younger children thought was not less-than older children, it was just different processes. Piaget’s (1955, 1962) theory was that cognitive development happened through the processes of assimilation and
accommodation. Assimilation is attempting to incorporate new information by fitting it into pre-existing cognitive structures. An example of assimilation would be a child calling all animals with four legs “dog.” Accommodation refers to the changing of cognitive structures to incorporate something new from the environment. An example of accommodation would be the child learning that not all animals with four legs are categorized as “dog” and might instead have different categorizations such as “cow” or “horse.” Piaget believed that development happened first as an internal/intrapersonal process, and then was displayed outwardly as children mastered cognitive benchmarks.

In contrast, Vygotsky believed that cognitive development was first an interpersonal process and then moved to an intrapersonal process (Corsaro, 1985). Vygotsky’s (1978) Sociocultural Theory of Cognitive Development was an extension on prior constructivist theories of cognitive development. The foundational difference, compared to other constructivists, was that Vygotsky believed that cognitive development happened through social interactions. Cognitive skills developed through children’s interactions with others more skilled than themselves. Primarily this meant adults, but also included older or more knowledgeable children. When children interacted with others with more skills, they could do things that alone would not have been possible. In other words, a child might not be able to independently complete a task such as putting together a basic puzzle, but with the support of interactions with a more skilled or knowledgeable person, the child can develop the cognitive skills needed and eventually complete the task on their own. Vygotsky called this the Zone of Proximal Development (ZPD). Vygotsky (1978) stated, “What a child can do with assistance today she will be able to do by herself tomorrow” (p. 87). In other words, children’s development can advance through interaction with
a more knowledgeable person (adult) helping the child to reach just beyond their current level of development.

Understanding the constructivist paradigm, including Piaget’s theories of cognition and Vygotsky’s theory of ZPD, is important to understanding Corsaro’s interpretivist paradigm. The interpretivist paradigm is firmly rooted in Vygotsky and Piaget’s work. Corsaro began his own ethnographic work utilizing a constructivist paradigm. During his fieldwork, he found that a constructivist lens of viewing interactions as a learning experience did not fully capture what he was observing of children’s collective processes.

Corsaro explained that he began to doubt the constructivist paradigm’s ability to explain observations such as children challenging the conventional rules in their classroom. For example, Corsaro found that although the classroom rule was to not bring toys from home into the classroom, children found creative ways to subvert this rule, such as sneaking small toys in their pockets. The term that Corsaro uses for this type of scenario, borrowed from Goffman, is “secondary adjustment” (Goffman, 1961).

Children did not learn secondary adjustment techniques through the support of the ZPD. However, they may have learned and adjusted strategies from, or with, their peers. The constructivist paradigm views the way that children learn as happening through observation or guidance of a more knowledgeable or skilled person. Vygotsky (1978) explained, “The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers” (p. 86). Constructivist theory is a big enough frame for understanding development when there is a power distance between the child and teacher. However, constructivist theory does not account for the learning that happens between children
who are peers and at the same level. In a preschool classroom, some children may be more advanced in certain areas than other children, thus creating the dynamic of teacher and learner. However, children also learn and develop from interacting with peers at the exact same level of knowledge or mastery as each other. Interpretive reproduction theory is a response to this gap of understanding children’s development.

**Interpretive Reproduction**

Interpretive reproduction is a theory created by Corsaro to better encapsulate what he was observing during interactions between children. The term “interpretive” describes the “innovative and creative aspects of children’s participation in society” (Corsaro, 2020, p. 11). The term “reproduction” captures the idea “that children are not simply internalizing society and culture but are actively contributing to cultural production and change” (p. 11). Interpretive reproduction conceptualizes the inclusion of children’s roles in their own development and learning through peer to peer, alongside children learning from a more skilled person or from their environment.

Corsaro pushed back on the constructivist view of development as a linear process of children becoming more adult-like. He views development as a productive and reproductive process. In other words, the meaning that children make out of their own environment and interactions then produces parts of their own cultural system that again will impact the child’s development, and so forth. Constructivist theories, such as Piaget’s assimilation and accommodation, are not thrown out the window. Interpretivist reproduction is a furtherance of these theories with additional processes for learning of appropriation, reinvention, and reproduction (Corsaro & Molinari, 2000).
While Corsaro’s work has emerged out of a constructivist paradigm, he has critiqued the central focus on individual development in constructivist theories of socialization. Even though Vygotsky’s theory places interactions as the impetus of learning, interactions are viewed as a vehicle for each child’s own development. Corsaro’s interpretivist reproduction theoretical lens on socialization is collective. Corsaro is not negating the theories of cognitive development, rather critiquing the application of those theories to the study of socialization in childhood. Studying socialization from an interpretivist reproduction lens is the foundational theoretical framework of peer culture.

**Priming Events**

During the early childhood years, as children are in out-of-home contexts more frequently, they are going through developmental processes both individually and collectively (Corsaro & Molinari, 2000). Children’s participation in the collective processes of a context such as a preschool classroom prepares them for transitions and social construction in the future. The term used to describe these collective processes is “priming events.” Priming events are derived from interactions with peers and will be the roots of how children navigate social contexts and transitions.

The importance of including priming events in this discussion is that it is connected to a value identified in block play studies. As previously discussed, one main focus of block play research has been the correlation between early experiences in block play and future outcomes. Something is happening for children during block play that might support the development of desired skills, such as critical thinking. Corsaro’s conceptualization of priming events is aligned with the common best practice theories presented in block play literature. Social interactions and
collaborative experiences in the early childhood years are foundational to children’s behavior and navigation of their world throughout their lifespan.

**Cultural Routines**

Corsaro (1992) stated, “Children’s participation in cultural routines is an essential element of the interpretive approach” (p. 163). In any culture, routines are the driving force in producing and maintaining the foundational social systems. In other words, cultural routines are the guidance system for behavior and interactions. Children’s cultural routines are informed by prior interactions with adults. Corsaro explained, “Children often are exposed to social knowledge they do not grasp fully” (p. 163). They then take this social knowledge and address the confusion by reproducing and readdressing it in their interactions and experiences with their peers. In block play, cultural routines can be seen in the way children share space or supplies, how conflicts are managed and resolved, the types of structures children decide to build, how children navigate joining in and collaborating, how children’s friendships develop and sustain, and much more. Cultural routines change through collective processes based on children’s experiences. When a routine is not working, or causing too much frustration, children will work to re-establish how things are done to better suit their needs and goals.

**Peer Culture**

Peer culture, according to Corsaro (1992) is, “A stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with peers” (p. 162). Corsaro (2003) believed studying peer culture in early childhood is important because it can uncover understanding of how children are developing communicative skills and social knowledge. An essential component of the conceptualization of peer culture is that the routines
that are collectively produced have elements that are social, cognitive, and emotional (Corsaro, 1992).

Corsaro has developed the theory of peer culture in early childhood over the course of decades of research as a participant observer in early childhood classrooms. Corsaro identified basic routines in the interactions of children playing together. This means that Corsaro looked for similarities between how children spoke to each other, moved about the space, or managed their play across different scenarios of interactions. Corsaro explained that adults initially create the rules and environment, but eventually children take over the management of social order by engaging together in communal processes. During the preschool years, three to five years old, children have a desire to be social, but they also have a competing desire to gain control of their world. Corsaro and Eder (1990) stated, “Children make persistent attempts to gain control of their lives and to share that control with each other” (p. 202). The patterns of behavior were discovered with sharing and control as the fundamental elements.

Child development is an essential backdrop to identifying meaning in children’s interactions. This is different than the paradigms of child development which operate to understand how children are developing. Rather, child development means the skills and competencies that are widely accepted in the field of child development at any given age. During the preschool age range, children are still developing the language and cognitive skills that are necessary for artfully negotiating who can play and what is happening in the play. At this age, it is a complex cognitive task for young children to integrate other children’s thoughts and desires with their own plan. Because they are still developing their ability to integrate their peers’ ideas into their own play, children also spend a considerable amount of effort protecting their play and routines from being disrupted by other children.
Conflict arises between children as a product of children trying to develop and negotiate their sense of control. Corsaro challenges the assumption that such behavior is inherently disruptive and disorderly. Instead, Corsaro suggests that conflicts and disputes provide children with a rich arena for the development of language, interpersonal and social organization skills, and knowledge. What might seem to adults as an inconsequential dispute over a particular color crayon is actually children practicing strategies for gaining control over their own play. Through conflict, children reinforce elements of the peer culture in regard to effective strategies for acquiring or retaining play materials, social power and positions, and their own (non-adult initiated) social rules.

**Statement of Problem**

Young children’s peer culture, through a theoretical lens of interpretive reproduction, has not been empirically explored in the exclusive context of the block play area in an early childhood classroom. Peer culture has previously been studied within the full classroom context, often throughout a full school day. The interpretive reproduction framework supports the notion that peer culture has a significant influence on child development outcomes (Corsaro, 2018, p. 129). Children plant roots during the early childhood years for interacting and relating to others, and their role or position in a group setting.

The peer culture of young children is still an underrepresented topic in empirical studies on both peer culture and child development. Corsaro (2018) has stated that the field of study on socialization in early childhood is strongly focused on children developing into adults, without enough emphasis on how children are experiencing childhood and contributing as members of their culture. There is tension between Corsaro’s theoretical lens and the goals of prior studies on block play in early childhood classrooms. The foundational thesis that unites block play literature
is that playing with blocks in early childhood is a uniquely powerful means of developing children’s individual skills and knowledge. Corsaro’s theory of interpretive reproduction does not entirely dismiss studying development of “private internalization of adult skills and knowledge” (p. 18). Interpretive reproduction includes and foregrounds the innovative ways children are contributing to their own cultural production and reproduction with their peers. Studying peer culture within the context of the block play area of a classroom is at the intersection of these two theoretical perspectives. During block play, observers can have a window into how children are interpreting, integrating, and producing the world around them through structural representations and interactions.

Wooden unit blocks and the block play area are open-ended and unstructured (see Figure 2). Children have more agency to control the space and their play because space and materials are not predetermined. Other spaces in the classroom have designated places to sit and materials with implied meaning and use. Without these constraints, children have the opportunity to be flexible in their conceptualizations of the design and meaning of structures. Children can expand on and manipulate the structures in their world, such as a house made for pizza parties or a castle-boat.
Beyond classroom teachers, this study can inform anyone with a stake in supporting children’s development and transitions into schooling. The takeaway from this study could help professionals and anyone who cares for children to understand the world that children live in and experience. The preschool years are an especially important time for children to be primed, or plant their roots, for how they will interact with other people in their lives now and in the future. Policy makers making funding decisions or setting guidelines for educators can have more knowledge about how children might be best supported, through children’s own perspectives.

The study proposed here will explore the ways that children appropriate, reproduce, and reinvent their experiences, beliefs, and knowledge. Through a novel approach to studying block play, knowledge can be gained through the peer culture of children themselves, from their perspective. This study will also delve into children’s negotiations and conflicts as they try to
share materials and space, while also desiring to remain in control of their own plans. Children manipulate their physical environments, not just their socially structured ones. They develop on their own terms a deeper social and collective development of friendship, relationships, and group dynamics that pushes beyond the individualistic focus of much of the block play literature. This study will seek to understand children’s cultural routines while joining or being joined building, building together, and the types of friendships that develop and persist in the block play area. It is first necessary, however, to review literature on block play to put these investigations into context.
CHAPTER TWO
PEER CULTURE, CORSARO, AND BLOCK PLAY

Wooden unit blocks are a classroom material that are not altered by the demographics of a school; they are the same color and shapes in all early childhood classrooms that have them. In contrast, other play materials such as plastic kitchen food, art supplies, and books are varied based on the context within which the school is situated. Corsaro (2018) explained that children use material aspects of culture, such as blocks, to produce other material artifacts of their peer culture. For example, wooden unit blocks are a material aspect of children’s culture in early childhood classrooms, but the block structures that are created by the children in the classroom are artifacts that have meaning to that specific group of children. Therefore, structures that children create can be studied as visual representations of culture. Corsaro noted that the vast majority of study of children’s material culture has been on toys, through the lens of psychologists. This research is virtually all quantitative in methodology, testing the toys’ effects on individual child development. The example Corsaro provided was studies that explore the effect of toy guns on aggression in boys. Block play research is mostly included in this category as many studies focus on what children gain developmentally from interaction with blocks.

The peer routines that are unique to preschool aged children, compared to children who are younger or older, involve learning to gain access to play. During this developmental period, there is a fragility associated with cooperative and collaborative play because children are also still developing the verbal and cognitive skills to navigate these situations. Corsaro (2018) explained that there is a tendency for preschool aged children to be protective of their interactive
space because they want to protect their play from interruption. Children want to keep playing what they were playing and are not yet skilled at expressing this concern or figuring out ways of including others without disrupting their play.

The block play area is an especially ripe space to observe these interactions because of the visual nature of block structures. When children are building, they have a mental image of what they want to build. When a new child wants to join, they have to alter that image in order to incorporate ideas and actions of others. As children have daily interactions of this nature, they begin to develop strategies for entry or resistance. Observing interactions of children making attempts to play collaboratively can provide rich information about the processes of the children’s peer culture (see Figure 3).

Figure 3. Blocks, Big Structure, and the Block Play Area

The block play area is an opportunity to deepen understanding of young children’s peer culture. With this study I hope to learn how children contribute to the creation of the culture of
which they are a part. Through observations of children engaging in block play, I anticipate learning about the processes of appropriating, integrating, re-inventing, and reproducing the physical and social structures of the adult world. Additionally, studying peer culture means discovering the ways that children figure out how to accomplish their own goals while also collaborating with peers.

*The Block Book*, edited by Elisabeth S. Hirsch (1984), is one of the most frequently mentioned texts in discussion with professionals who study block play. The book maintains a reputation as an expert voice on block play. The first chapter in *The Block Book* discusses the contribution of the creator of the basic unit block, Caroline Pratt. During her time in New York City’s settlement houses, Pratt began to realize the need for educational materials beyond teaching reading and writing. Infusing learning with play was revolutionary thinking during this time. Using her woodworking skills, Pratt began developing wooden toy materials. Pratt worked with colleagues Harriet Johnson and Lucy Sprague Mitchell to exhaustively observe, record, and analyze young children’s block play. This studying lead to understanding and theorizing certain principles of block play’s value to children. They found that block play offered unique possibilities for children to express themselves creatively and act out or explore previous experiences. Blocks were an outlet for children to tangibly interact with internal thoughts and emotions.

This section will discuss how researchers have built on from Pratt’s work to find evidence of block play’s value in preschool classrooms. Identifying the value of anything is connected to time and place. The goals of early childhood education, or objectives for what young children should learn and how they should develop, have changed over time as societal values have shifted. Block play’s valuation is necessarily tied to the goals of early childhood
education. I will discuss what researchers have identified as the value of block play along with how researchers have adapted their research focus as the goals for early childhood education have shifted over time.

**Review of Block Play Literature**

**Historical Context of Block Play**

The empirical research focus on block play has reflected the societal values and the social and political movements of the time. The purpose of offering some historical background is to help illustrate the evolution of how researchers have defined the value of block play through time. Provenzo and Brett (1983), authors of *The Complete Block Book*, stated, “It is our belief that block building potentially provides one of the most valuable learning experiences available for young children” (p. 2). Block play has remained a staple in early childhood classrooms because researchers have been able to demonstrate the value of block play for meeting the learning and development objectives for young children.

The child study movement began in the 1930s and continued through the 1950s (Tunks, 2013). Schools for young children were rapidly opening across the country as knowledge and interest in child development increased. Block play began to be identified as a valuable activity and material for comprehensively supporting all areas of development. Harriet Johnson’s (1933) work detailed the use and value of unit blocks. Both Pratt and Johnson believed that wooden unit blocks, differently than other types of blocks, were an ideal material for supporting children’s development. They believed the simple design allowed children to recreate the experiences they had on field trips with no limits or barriers (Provenzo & Brett, 1983). In early childhood, field trips are one strategy teachers use to enrich the classroom content. When children represent experiences from field trips with blocks, it is a concrete and visual demonstration of their
During a time when researchers were trying to identify the most important parts of child development and professional teaching, Johnson (1933) situated blocks and the block play area as an essential nucleus. She identified stages of block play that increase in complexity based on age and development of the child that have remained virtually unchanged and still used in block play literature and textbooks to this day.

The influx of research on child development helped researchers to connect block play’s value to developmental skills and milestones. Layman (1940) stated, “If the objectives of nursery school, kindergarten, and Grade 1 are to be achieved to a desirable degree, block play is extremely important” (p. 607). Layman described blocks as a type of all-purpose utility tool for reaching any and all of these objectives for children.

Block play research aligned with an ongoing emphasis on children learning about their own social worlds and interactions. Lois Johnson (1957) wrote that, at the time of publication, “Block play is currently receiving special emphasis…as a method of teaching social studies content” (p. 623). The aspects of social studies that Johnson pointed to are children building structures within their community, such as houses, police stations, or hospitals. Literature on block play identified a value of children learning the necessary social skills to be well-adjusted members of a community.

The block play area provided a dual opportunity for children to explore social interactions and for researchers to observe densely concentrated interactions. Studying interactions in the block play area was not limited to peer-to-peer social interactions. Block play researchers explored how teachers might change children’s behavior by mediating their own behavior or the classroom environment. Kinsman and Berk (1979) published an article wondering how the social interactions between children may change if the housekeeping and
block play areas were joined. Researchers wanted to understand how teachers influence the group of children. Kinsman and Berk found that teachers’ modifications of the classroom environment of the block play area could change behaviors and interactions of children to meet educational goals.

There was a shift in block play literature, around the 1980s to 1990s, from conceptualizing “children” as a homogenous group to learning how differences, such as gender, might mediate outcomes. In block play studies, researchers began to identify that some children may be benefitting from block play more than other children. For example, researchers started to document the differences in the quantity of boys in the block play area versus the quantity of girls (Varma, 1980). Studies that were more general in scope in early childhood classrooms during this time did also acknowledge gender inequalities. Studies with a focus on developmental trajectories explored the differences in cognitive capacities based on gender, but as more of an internal factor (e.g., Barnett & Klieber, 1982). Studies more specifically about play had a greater focus on teacher-to-child interactions and biases, or how peer friendships change based on gender over time, rather than how gender may mediate peer interactions in a current moment (e.g., Evans, 1998; Ramsey, 1995).

As attaining future academic standards through preschool curriculum became an overarching value, researchers began asking the question of what the consequences might be if girls are not engaging in block play as much as boys in early childhood classrooms. One of the questions for Rogers’ (1985) study was whether there were sex differences in social participation in block play. Researchers wanted to know if the way children were interacting with blocks or their peers in the block area was different based on gender. This was some of the earliest
considerations for how children might be having an influence on each other’s experiences in the block play area, versus the teacher being the main moderator of the space.

Danby and Baker (1998) observed the ways that boys socialized each other’s demonstration of masculinity in the block play area. The goal was to understand how the patterns of interactions that previously may have not seemed meaningful to adults are actually a significant way that children learn about how to behave. Their study on masculinity in the block area stands out from the crowd of other literature up to this point because other studies have focused on what children can gain directly from the blocks, or from teacher involvement. However, the focus of Danby and Baker’s study is about what the space of the block play area might facilitate between children. They uncovered how a group of male students had an organized system within their play in the block area in which older boys socialized younger boys or newcomers through a series of phases. These phases included the verbal and physical ways that the older boys protected the space and the behaviors of younger boys in order to be granted access. They identified the block play area as a valuable place for children’s agency to develop their own social rules.

As more attention was being put on when and how children were learning heading into the 90s, block play researchers began to ascertain that the pool of empirical studies on block play was small and disorganized (Conrad, 1995). Phelps and Hanline (1999) said, “Let’s get serious about playing blocks!” (p. 62). Researchers recognized the need to show the importance of block play in terms of child development. Researchers expressed that block play needed more systematic and rigorous study to demonstrate the value in a way that would be regarded as more legitimate in the eyes of educators and policymakers.
Researchers started to attempt to connect specific curricular areas, as opposed to developmental domains, with block play (Montopoli, 1999). Pickett (1998) was interested in finding a connection between block play and literacy behaviors. Although not precisely defined, literacy behaviors seemed to mean that children were interacting with books, written text, or writing materials during play, even if they were not actually reading or writing real words. Caldera et al. (1999) was interested in finding patterns connecting play preferences, block structure assembly skills, and spatial abilities. The term “spatial abilities” is defined as being comprised of spatial perception, mental rotation, and spatial visualization. In other words, being able to think about how things move in space and what things may look like from a different perspective. Spatial abilities were being linked to mathematics and science skills through research in those fields.

The value of play, in general, came into question at the turn of the twenty-first century in response to pressure for younger children to meet increasingly higher standardized academic benchmarks (Tunks, 2013). Educators and child development professionals needed to demonstrate that play was integral to growth and learning. Standards-based federal laws started in the mid 1990’s under the Clinton administration but were advanced by the No Child Left Behind Act of 2001 under the G.W. Bush administration (Shepard et al., 2009). Federal and state funded programs, such as Preschool for All in Illinois, began to be rolled out. Funding became attached to demonstrating proof of meeting standards (McLaughlin, 2002; Brown, 2007). Early childhood teachers were required to complete documentation that verified children’s growth, especially in the “academic” skills, such as learning the alphabet and counting up to 100 (Brown, 2007). Teachers’ evaluations also were connected to demonstrating this growth.
Block play research focused in on justifying how playing with blocks in early childhood classrooms provided specific types of learning experiences (Cohen, 2006). This is an extension from the 1990s, when researchers were trying to generally link block play to meeting curricular standards. Researchers identified a need to get more specific in how standards were being met and find a way to establish that the value of block play was more effective than other education techniques like flash cards or worksheets. Pushing back against the increased use of worksheets to teach children math and literature, researchers validated that learning during block play was more salient and meaningful for children to reach the benchmarks (Newburger & Vaughan, 2006).

Two studies that came out in the same year had a focus on watching growth over time, and correlating block play to curricular standards and future academic success. Hanline et al. (2001) wanted to explore a deeper understanding of children’s development over time, and how to evaluate it, with a 3-year study of block complexity. They developed a block construction scale for teachers to use as a part of the child’s other evaluations or portfolio. Wolfgang et al. (2001) longitudinal study of block play, which is widely cited by scholars of early childhood mathematics, is a seminal study that purported to have found a strong positive correlation between block play in preschool and future academic success.

Previously, block play had not been studied longitudinally on its own, only as a part of a limited collection of studies with a more general curriculum focus. Wolfgang et al.’s (2001) study assessed children’s foundational mathematics skills during their preschool years, along with observational data about the quantity of block play a child engaged in. Their skills were assessed by using a five-point scale which rated children’s adaptiveness and play complexity. Researchers observed groups of children playing with blocks in their classroom and live-scored
children’s block play performance. They continued to monitor children through elementary, middle school, and high school with standardized tests and grade reports. The strongest results that they found connected block play in early childhood to high school academic success. They reported finding a strong positive correlation between time spent in the block play area and standardized test scores, grades, and mathematics courses.

This study is the first, and currently only, study of block play to track preschool to high school, with regular intervals of data collection through the years. This was an exciting piece of evidence to support legislation for more investment in blocks. It has also served as justification for continued study of block play. This study is frequently used as the premise that block play in the early years will give children a better academic future. In the larger scope of literature on block play, it is problematic that this study is being used as evidence of causation. The researchers did not conclude block play causes better academic outcomes; they concluded they had found a strong positive correlation.

Researchers continued to explore how children’s experiences in block play might differ based on particular characteristics. Sluss (2002) explored gender differences in block play, but with a slightly different question than how it was studied in the 1980s. The focus in the 1980s was on how many boys versus girls were playing and for how long. Sluss wondered how learning about the differences in the ways boys and girls play with blocks, and what skills they were or were not developing, could inform a targeted approach for teachers to influence play in the block area. For example, Sluss found that girls communicated more, and better, than boys during block play. Sluss’ recommendation was that since literacy skills have been linked to language development, teachers could influence conversational interactions in block play to support boys in achieving these standards.
Similarly, researchers started asking whether adding materials, such as books or pencil and paper, would influence how children behaved or utilized blocks, which could increase the value for specific skills, such as literacy skills (Wellhousen & Giles, 2005). Some studies, such as Casey et al. (2008), wondered if the value of including stories from books placed in the block play area could also support spatial skill development. Ultimately, these studies were examining ways that teachers’ modification of the space or materials might influence the ways children behaved and interacted.

Interactions between children in the block play area has been an increasing area of focus for researchers as “twenty-first century skills” has gained prominence as the overarching goal for child development and education. The term “twenty-first century skills” is a specific set of capacities that encompass the skills that are thought to be necessary for children to learn so that they can be successful and productive adults (Pollman, 2010). Twenty-first century skills are often referred to as the “4 Cs,” which are creativity, critical thinking, collaboration, and communication (Partnership for 21st Century Skills, 2011). This term became a framework for guiding educational goals and was in response to rapid technological growth. As an expansion and guide for academic standards, twenty-first century skills have had a greater focus on interpersonal skills, supporting a retreat from the heavy focus on academics for learning and development standards for young children.

While interactions between children during block play has come into the spotlight, the focus has remained children’s individual development. The role of peer culture, which underlies all interactions and behaviors, was not being included in the conversations. For example, Cohen (2015) examined how the layers of language discourse that children used during block play mediated their social interactions, thereby leading to enriched experiences for language
development. The value that Cohen was identifying in block play is that the circumstances of this type of play, both space and materials, creates an opportunity for children to develop skills of rich communication, language use, and verbal collaboration.

Even when studies were on the topic of group skills, such as collaboration, they typically were viewing how this coordinated play supported individual development. For example, Ramani et al. (2014) studied the way children used language that was spatially oriented and the complexity of their structure while playing in dyads. Although the researchers were interested in how the dyad’s coordinated play might influence building, the real goal was to understand whether or not dyads supported more spatial language or block complexity, which could support individual development, than when children played alone.

Blocks and block play are described in a vast majority of block play literature as a staple in early childhood classrooms because researchers and scholars have worked hard to identify its value throughout history. As the calendar turns to a new decade, there is an opportunity for block play research to explore the meaning of children’s behaviors and interactions from their perspective. Studying block play with an interpretive reproduction lens provides a different perspective on areas of social interaction in classrooms, such as the block play area. Interpretive reproduction theory does recognize the importance of studying child development from childhood into adulthood. Interpretive reproduction foregrounds culture created and produced between children, with individual development as a background component. Understanding how children develop and learn provides context for identifying the meaning children are making during play. As this study will focus on preschool aged children from three to five years old, literature and knowledge on children’s developmental stages helps to frame behaviors.
The next section will focus on block play research as it relates to the four main domains of child development. While the goal of this study is not to track individual child development, the literature has the purpose of framing social interactions. This is especially important for the length of this study occurring over the course of a full school year. The literature discussed below provides a foundation for watching changes in the peer culture over time.

**Child Development**

Development in early childhood is often divided into four domains: cognitive, language (communication), social/emotional, and motor (physical) development (Lightfoot et al., 2012). This section will present literature and empirical research on block play that had a specific focus of each of these domains. Below are the ways that researchers and scholars have discussed and examined the value of block play in relation to the domains of child development. Bringing child development into a study of children’s peer culture is important because development is intertwined with how children interact and interpret meaning.

**Cognitive**

Cognitive development in the early childhood years includes developing the capacities of processing information, overcoming limitations in performing logical transformations of information, and changes within specific cognitive domains (Lightfoot et al., 2012). Block play literature has commonly explored cognitive development as it relates to science, technology, engineering, and math (STEM) skills. STEM curriculum has become more popular as educators have identified STEM as being important to future careers in the twenty first century. Although studies about engineering and block play are becoming more frequent, mathematics has been the bulk of the cognitive development focus in block play literature (Casey et al., 2008; Wolfgang et al., 2001; Verdine et al., 2014; Trawick-Smith et al., 2017; Schmitt et al., 2018; Pirrone et al.,
The capacities that overlap with block play associated with math are understanding relationships, spatial skills, and foundational mathematics skills.

Unit blocks have been identified as a valuable material for children to develop their conceptual understanding and relationships with tangible objects. In other words, understanding the size of two blocks relative to each other, or how many of one size block would equal a bigger size block. The basic unit block is designed in a standard way that the depth is half the size of the width, and the length double the size of the width (1:2:4). The properties of the blocks allow children to learn part-whole relationships, size, measurement, shape and spatial representation (Reifel, 1981; Reifel & Greenfield, 1983). Block play research has followed alongside research on early childhood mathematics. Research on mathematics learning, through block play, has continued to dig in further into foundational cognition. As researchers have been able to identify cognitive skills that children gain during block play with greater detail and specificity, the value of block play has been more clearly articulated.

In recent years, there has been an increased focus on the value of unit blocks for developing spatial skills (Caldera et al., 1999). Spatial skills are defined loosely in the literature as the way a brain is able to process and understand where things are in space. Some researchers have used “spatial language,” words associated with spatial skills, to measure the frequency or quantity of spatial skill building activities. Some specific cognitive processes that are included in the term spatial skills are: being able to think about objects in differently oriented ways, visualizing things from a different perspective, and understanding the spatial relationship between objects (Pollman, 2010). Additionally, spatial skills are useful for everyday cognitions such as understanding distance, recognizing shapes and patterns, and understanding locations.
Spatial skills have been identified as being foundational to all of the categories of STEM learning.

Researchers have also evaluated cognitive development in block play more broadly, along the lines of 21st century skills. Pirrone et al. (2018) examined the areas of logical thinking, divergent thinking, nonverbal reasoning, and mental imagery. These four terms are all considered to be 21st century skills. The researchers wanted to link these cognitive processes with block play. The researchers used a randomized control trial design. Even though this study occurred in a school and not a laboratory, the researchers were able to control for assigning children to particular classrooms, the quantity of time children played with blocks each week, what curriculum the teacher used for block play, and the standardized measures. Their findings suggested that in all areas of mathematics skills, the experimental group performed better. Connecting block play with four very specific ways of thinking is important for demonstrating the value of block play to stakeholders, such as administrators, teachers, or parents.

Another cognitive development skill featured in block play literature is symbolic representation, where an element of a child’s life or knowledge base is represented by another object. In block play, children play symbolically by using the basic shapes to represent elements of their environment. For example, a child might take a wooden unit block and move it around on the ground saying, “beep beep!” as if the block were a car. Symbolic representation is important for cognitive and language development because it is the foundation of more abstract symbolic use, such as numbers and letters (Vygotsky, 1978; Cohen, 2006). The earliest research on block play focused on the value it has for development and symbolic functioning. Harriet Johnson (1933), Guanella (1934), and Bailey (1933) studied the labelling or naming of block
structures. When children name or label structures, it demonstrates that they are representing and appropriating things they already know (Cohen, 2006).

**Language**

During the early childhood years, a child’s ability to comprehend and use language develops rapidly and intersects with cognitive, social, and emotional development (Lightfoot et al., 2012). In particular, children at this age are learning to segment speech into meaningful units of sound (phonological), the meanings of words and combinations of those words (semantic), and the rules of the sequencing of language (grammar) (Lightfoot et al., 2012). Language is discussed in block play research in similar terms of vocabulary or communication (phonological and semantic), and pre-literacy skills (grammar). Literacy for children who are three to five years old is not about teaching children to read and write with fluency, it is about building foundational capacities that will support a child in learning to read as they get into the elementary school years.

The term literacy in block play research, or more specifically “literacy enriched,” means materials with written words, such as books, or materials that might promote a child to pretend to write, such as a clipboard with paper and pencils intentionally being included in the block play area. Language development supports literacy capacities; children need to learn vocabulary before they can learn how to read words. Block play literature that focuses on literacy, as opposed to just on language development, are aligned with the current educational goals of linking growth with academic capacities.

Snow et al. (2018) observed linguistically diverse kindergarten students’ use of writing materials in a literacy enriched block play area. The researchers wanted to learn about whether the block play area could be a space to support language development, through pre-literacy
experiences, in a way that was meaningful and salient to children, particularly those who English was not their first language. The researchers discussed that a possible explanation might be that the block play area is so motivating for children that they are willing to take risks, such as writing or using new vocabulary, in order to continue to participate, which they might be intimidated to try in other types of play.

Researchers have recognized the verbal communication opportunities during block play. The premise is that the block play area is a space where children will need to talk to each other. Children need to negotiate the use of materials, discuss their plans and ideas for the structure, and problem solve together when they experience a roadblock. Children develop vocabulary because they need to use precise words, such as describing the size and shape of a block, to accomplish their building agendas. Cohen’s (2006) dissertation and subsequent empirical research has focused on language and voice in block play. Cohen has found that block play fosters the social practice of language, which is a key component of meaning appropriation and symbolic representation. In other words, language used during block play allowed children to label blocks and structures with the names of objects or places of their experiences.

**Motor Development**

Physical development of motor skills during early childhood allows children to use and control their bodies with greater effectiveness (Lightfoot et al., 2012). Children are excited and motivated to use these new motor skills during play (Lightfoot et al., 2012). Although block play literature does include discussions of motor development during block play, it has not been an exclusive focus of research. Motor development in block play research has been discussed as a combination with cognitive, language, or social skills.
Block play has been cited as being a mechanism for improving the development of both fine and gross motor skills (Brown, 1942). Gross motor skills are the development and strengthening of large muscles and whole-body coordination. In block play with wooden unit blocks, children lift blocks and move them, crouch down and stand back up to examine the structure, reach to add or adjust blocks at the top of a tower, and more (Provenzo & Brett, 1983). Block play is one of the few opportunities for children to engage in large motor play inside of the classroom (Newburger & Vaughan, 2006). Movement in block play looks different than when children are running around outside in a playground but utilizes similar muscles in a way that is perceived as more acceptable and safer for indoors.

While block play requires children to utilize large muscles to move blocks or travel around the space, fine motor skills are equally utilized to place and balance blocks (Provenzo & Brett, 1983). When a child places a block on the top of a structure that then tumbles to the ground, the child is experiencing an opportunity to adjust their fine motor skills through rebuild and practice. Children are motivated by the desire to build a structure according to their plan, so their determination to succeed in building requires the child to focus on how they are using their fine motor capacities (Provenzo & Brett, 1983; Cartwright, 1995).

Cartwright (1995) explained that not only do children develop motor skills during block play, but children’s increased ability to use their body to manipulate blocks allows children to build bigger and more complex structures. As children are at the preschool age, their motor skills allow them to stack, balance, and carry longer blocks (Johnson, 1933).

**Social and Emotional Development**

Social development is comprised of skills that allow a child to interact socially with peers. Lightfoot et al. (2012) described social development as the “Socialization, through which
they acquire the standards, values, and knowledge of their society” (p. 340). Corsaro (2020) does not agree with this definition of socialization. In fact, he has mentioned his desire to replace “socialization” with new terminology because it is defined in this very hyper-individualistic and utilitarian way. It is important to keep in mind the opposite ends of the spectrum Corsaro has positioned himself from a constructivist view of development, as social interaction is at the heart of this study.

Literature has identified the block play area as social in nature (Wellhousen & Kieff, 2001). Researchers have demonstrated that children utilize social skills such as navigating resources and space sharing, negotiation, and collaborative structure building (Wellhousen & Kieff, 2001). The literature identified that block play both requires and develops children socially (Aksoy & Aksoy, 2017). This is aligned with Vygotsky’s (1978) theory of play, that children have social skills that are greater during play because the play itself is so motivating and regulatory. The intense motivation that children experience during block play to build or complete a structure provides a special circumstance for social development (Tepylo et al., 2015).

The main task of emotional development in early childhood is self-regulation (Lightfoot et al., 2012). Self-regulation incorporates internally regulating emotions, thoughts, and actions (Lightfoot et al., 2012). Developing other capacities, such as self-concept and understanding emotions of others, support a child’s ability to regulate (Lightfoot et al., 2012). The literature has identified that block play is also valuable for emotional development in regard to a child’s confidence, self-esteem, and recognition of feelings in self and others (Aksoy & Aksoy, 2017). Wellhousen and Kieff (2001) explained that block play provides children an opportunity to meet their emotional need to plan and make decisions, along with acting out and processing their life
experiences. It takes real work for a child to conceptualize a structure and then build it to completion, so the emotional reward is authentic and salient (Aksoy & Aksoy, 2017). Children feel proud of what they built. Block structures are a visual representation of children’s accomplishments (Tepylo et al., 2015).

**Assessing Development Through Block Play**

One of the theories that has consistently remained in literature on block play is Harriet Johnson’s (1933) *Stages of Block Building* as a guide for assessment. These seven stages, geared at early childhood teachers, give a developmentally informed idea of the way children may use wooden unit blocks from age 2 to age 6. The stages are an assessment tool for teachers to observe where individual children are at developmentally, based on the structures that they are building. Using the physical block structures as an assessment tool for a variety of developmental components has been a common approach for data collection and findings in the empirical research on block play (Provenzo & Brett, 1983; Wellhousen & Kieff, 2001; Phelps, 2012).

Utilizing block structure complexity as a developmental assessment opportunity has been favorable because of the visual nature (Phelps, 2012). Lois Johnson (1957) described that block play is an ideal opportunity to analyze children’s behavior and growth because it is an activity that is frequently repeated, often daily, and extends the full span of a school year. Block play is unlike other materials or activities in the classroom, such as art. It may be a similar process over the course of the year, but the art materials or tools change regularly. Teachers may put out different mediums, such as paint or markers, or even different art projects, such as drawing or creating a sculpture. Unit blocks remain standard (Provenzo & Brett, 1983). They are plain and
unchanging. Even when teachers choose to incorporate other materials into the block play area, the unit blocks remain the base of the play.

Phelps and Hanline (1999) detailed that children’s development of spatial relationships and symbolic representation could be evaluated through scoring the structure complexity of blocks. They modeled their evaluative scale off of Guanella (1934) and Reifel (1984). Phelps and Hanline’s (1999) theory is that children will move through the stages in a sequential order, but children may not always demonstrate their ability in all of their block use. In other words, children might build in a way that seems “below” their ability. The evaluative model is divided into five stages, the 5th being “Representational Play” for ages three years and above. The markers of a child being in this stage are described as: building enclosures, building with some sense of scale, and the configurations are complex with details such as interior space or landmarks. Phelps and Hanline have also utilized this tool as an alternative way to evaluate growth and development for children whom traditional standardized scales or tests that may not accurately capture strengths or growth.

Trawick-Smith et al. (2017) wondered if there was a connection between the block structure complexity and mathematical thinking. They hypothesized that increasing complexity of block structures are an indicator of the development of mathematical thinking, or the cognitive processes that are necessary precursors to formal mathematics education. In other words, bigger and more intricate structures demonstrate that a child needs to use types of thinking such as problem solving, patterns, measurement, and other mathematics-related cognitive processes. They found that the variety of contextual factors, such as level of social participation and percentage of structures built without toys, were important to predicting block structure complexity. They also found that structures did not get more complex solely on the basis of age.
Harriet Johnson’s (1933) seven stages of block building identified in *The Block Book* also increase in complexity, but the stages are linked more to the general developmental categories, which are motor development, language development, cognitive development, social development, and emotional development. Each developmental category is an umbrella term for a collection of skills and capacities. As has been discussed earlier, the way Johnson is using the term “social development” is referring to individual gaining of skills, which is different than Corsaro’s (2020) definition based in collective social processes. The premise is that children move through the stages in order, around the same chronological age, because child development is also based on that same premise. Although children might develop at different rates, there is a sequence of how development unfolds that is believed to be universal. Trawick-Smith et al.’s (2017) study is not running contrary to Johnson’s stages, but it does differ in the premise that all children will go through stages of block building the same way according to age.

Technology advances in cameras has made tracking block structures through photos an increasingly advantageous option for measuring growth and development over time. Creating a record of finished block structures may also be a way that children can monitor and remember their own building experiences and growth. In the 1979 manual about block play from the staff of Celebration in Learning, there is a suggestion to teachers that they could preserve the structures by taking photos or drawing sketches. Further, they recommend Polaroids, because the child can see the picture right away, the child gets the message that their structure is special, it encourages children to play in the block area, and the children have a visual record of their work over time. Smart phones with cameras have added to the capacity for teachers, children, and their caregivers, to track, store, and see the block work instantaneously.
Conclusion

Block play and studying peer culture are a perfect pairing. Social interaction in the block play area is a necessity and inescapable, even for children who choose to build by themselves. These social interactions are complex and multi-layered as children navigate sharing and distribution of supplies and space. Beyond necessity, block play is an activity that children are highly motivated to communicate, share their ideas, and collaborate. Seeing other peers’ structures and creations fosters children’s curiosities and encourages asking questions. Additionally, it is an ideal activity and location to observe the internal battle of children’s desire to be social and share their play, but also have control. Due to the physical and concrete qualities of blocks and structures, this internal battle is also displayed outwardly in the ways that children manage the building process.

The above review of the block play literature demonstrated block play’s position in early childhood classrooms, both historically and developmentally. Researchers have continued to ask questions in order to build an understanding of exactly what makes block play such a special and standard activity in a preschool classroom. The review also highlighted the unique type of social setting of a block play area within a preschool classroom. It is a space where complicated social interactions are densely concentrated.

Block play literature comes from many fields of study and has been linked to being valuable for all areas of development. Researchers have studied block play using just about every type of research design available. In some cases, when a topic is researched so heavily that the results could mean anything to anybody, the validity and reliability of findings might be questioned. However, in the case of block play literature, it means the exact opposite. Regardless
of the angle, paradigm, or pedagogical underpinnings, researchers have continued to find
significant benefits of block play for children.

While the collection of block play literature has identified the value of block play akin to
a Swiss Army knife, in virtually all block play research, regardless of specific topic or focus,
includes a social component. In studies on cognitive benefits, such as problem solving, it is
within the social interactions that children develop the skills and capacities. To understand more
about the social interactions of peer culture in the block play area could be informative for any
variety of empirical focus for block play literature. In other words, studying peer culture in the
block play area could unlock new levels of value to identify.
CHAPTER THREE
RESEARCH METHODS

Research Questions

Research Question 1

What are the strategies and cultural routines of children joining, being joined, or moderating access when being joined in the block play area? How does the physical features of wooden unit blocks integrate into children’s development of cultural routines for joining and being joined?

Research Question 2

How do children navigate and negotiate participating in the collaborative activity of block play while still supporting their need for control over their play? How does conflict and negotiation shift shared meanings and cultural routines of building together?

Research Question 3

What does friendship look like in the context of the block play area? What types of friendships can be identified through observing social interactions in the block play area and how does friendship type mediate social interactions between children in the block play area?

Study Design and Methodology

Research Design

This study utilized ethnographic methodology. Ethnography is within a qualitative inquiry paradigm which is interested in exploring and understanding how people interpret, construct and make meaning out of their experiences (Merriam & Tisdell, 2016). The essence of
ethnographic research is the study of culture. To be able to build an understanding of how people are interpreting and making meaning of their world, researchers need to be immersed amongst participants for a prolonged period of time. This principle of ethnographic inquiry informed the decisions made in this study about the design and methods.

This was a study of one early childhood classroom. Observations were limited to the block play area during the morning free choice activity time. Focusing on one classroom allowed for the opportunity to deeply embed myself in the peer culture of the classroom. The time frame of this study was over the course of a school year, approximately three visits per week. Methods of data collection included live observations and field notes. Emerson et al. (2011) explained that writing descriptive field notes is not just “a process of accurately capturing as closely as possible observed reality” (p. 5). Accordingly, the aim of my field notes was not to produce an objectively accurate transcript. Rather, it was a process of “interpretation and sense-making” (p. 9) that informed what I included in field notes and the style of how I wrote them.

Included in the field notes were theoretical, methodological, and personal notes. Corsaro (1985) developed this way of writing field notes using multiple types of notes, with the goal of bringing forward influences on interpretations and observations that tell a more holistic story. Observations were recorded with a camera and audio recording device. Corsaro’s (1985, 2003) books that describe his field work experiences advocated for the use of recording devices in ethnographic work with children. The recordings themselves were not used as the primary source of data. The recordings were used to produce the field notes after observations were complete. Analysis began after the observation phase of data collection was complete and all field notes were finalized. The phases of data collection and analysis were designed to support rigor of the findings and conclusions.
Procedures

This study consisted of observations (in-person and digitally recorded) of the block play area of a preschool classroom during morning open choice time. Data collection occurred over the course of a school year. While there were exceptions, I was typically in the classroom three days per week (Monday, Wednesday, and Thursday). I arrived before students when the teachers were setting up the classroom (~7:45am) and stayed until the end of open choice time (~9:00/9:30). The schedule of the classroom changed during the year, which sometimes meant that I was also present for the morning meeting. My field notes sometimes included information about conversations with teachers before children arrived or morning meetings, but digital recordings were only taken during the open choice time. The transitional organizing (clean up) time was sometimes recorded, but not included in field notes or analysis. This decision was made because it was often teacher lead (or heavily supported) and included children who had not been previously playing in the block play area, and therefore qualitatively different than block play observations.

The Classroom

Observations occurred in a classroom in a private preschool, connected to a university, in a large Midwestern city. The children in the classroom were four years old to start the year and many turned five before the school year ended. Preschool is distinct from kindergarten and older early childhood grades (1st – 3rd) due to different academic/curricular expectations, classroom set up, and children’s developmental capacities. The Turtles classroom was open from 8:10am to 3:00pm, Monday through Friday.

The classroom was a relatively large space, compared to other preschool rooms I have seen. The front door of the room opened to an area with cubbies and hangers for children’s bags
and stuff. On the right side of the room there was another small, enclosed play area that was typically used for dramatic play. The main section of the classroom was open concept. There were small activity tables arranged throughout wooden shelves with supplies, books, and toys. Activity tables typically had two to four chairs for participants. There were also areas that did not have activity tables such as the “calm corner,” reading area, and outdoor patio. The block play area had a large blue floor rug. On the north and south sides of the rug there were wooden shelves with unit blocks and materials, organized by type. The west side of the rug was open, and the east side of the rug was against large windows. Due to the shelves and windows, children could only enter the block play area from the west side of the rug. The camera was placed on a corner post (looking down onto the rug) in the south-east corner. The audio recorder was placed in different locations but was often on the north-side of the rug.

Observations occurred during the morning open choice play time. Open choice time happened as children were arriving to school. Typically, all activity tables and classroom areas were open, with activities/materials chosen by the teachers. Activity choices made by teachers were informed by children’s interests and curricular/developmental goals. Activities/materials changed and rotated regularly. Differently, the block play area (with some exceptions) started as the empty rug. All items on the shelves surrounding the area, unless otherwise stated by teachers, were available for children to use. There were some non-block materials that teachers removed and added during the year, but the unit blocks and building materials remained consistent. Children were allowed to move to activities as they wanted. There were not set limits on the quantities of children in the block play area—the flow of children in and out of the space was sometimes supported by teachers to limit overcrowding or excessive noise/chaos.
Block play was a daily, regular open choice time option for children. The materials available included a mix of wooden unit blocks, other varieties of building blocks, and decorative materials (see Appendix A). In the beginning of the year there were “big blocks,” but those blocks were phased out due to the size of the blocks and limitations of space. There were wooden panels that children could choose to use to build on, or they could choose to build directly onto the rug.

There were three teachers—one lead and two assistants. However, the teachers worked as a team and were seen as equals in the eyes of the children. The teachers supervised the classroom with a mix of direct support and observing from a distance. In the block play area, teachers would sometimes be there to join in building with children or support behavior/conflicts, but often observed from a distance. This was a good fit for my study because teachers did not control or dictate what children were building. While teachers did step in to support children when it appeared to be necessary, they valued children working out conflicts with each other. The lead teacher explained to me that democratic practice was the foundation of her pedagogical approach.

Participants

All children in the classroom were considered participants, regardless of the quantity of time spent in the block play area. However, there were a few children who were regularly in the block play area and are therefore discussed more frequently. Teachers were not considered participants. Teachers or other adults present in the classroom occasionally provided information related to the children or classroom activities and this was sometimes recorded in field notes. The rules that teachers set for classroom behavior and the tone for appropriate ways to interact were very relevant to the study, but not analyzed independently. Teachers were interviewed as a group.
about topics related to observations around the mid-point of the year, but the interview was not included as a primary source of data for analysis. At times, other adults were present in the classroom, such as substitute teachers, support staff, or parents, while I was recording video. All adults/visitors were informed of the camera and lens range and asked for their consent verbally. None of these adults were considered participants of the study.

There were 22 students in the classroom. Demographic information was not formally recorded, but there was diversity in terms of race, language, and religion. The families at this school skewed to the higher end of socioeconomic status, but specific household income of families was not disclosed. A majority of the students (and two of three teachers) in the classroom were together as a class the previous school year, although there were disruptions in time together in the classroom due to COVID.

**Consent and Safety of Participants**

The school’s administration team approved my study with the endorsement of the classroom teachers. I sent a letter to parents/guardians about my presence in the classroom and information about the study I would be conducting. I attended a “back to school” information night to introduce myself to parents/guardians and answer any questions. Individual consent forms were not sent to parents/guardians, but they were given the option to “opt out” of the study. There was a contingency plan in the event that a parent/guardian did not want their child to participate, but no parents exercised this option. Parents/guardians were given my direct contact information, along with the contact information for my supervisors. They were also encouraged to reach out to the teachers or school administration if they had any concerns. No concerns or complaints were received.
The school required all children to wear facial coverings (masks) during indoor play through the full school year in classrooms where not all children were eligible to be vaccinated (due to age). Teachers/adults were required to wear facial coverings for most of the year, but restrictions were relaxed after the threat of COVID spread was low risk. Children and staff were required to test weekly (at school).

Any requirements of the school site about my presence, study approval, and safety were followed. Parents and guardians of students were provided with a letter detailing information about the study. Individual consent was not obtained on the basis that individual identifiable information was not recorded about the students. While I interacted with children, I did not ask individual children questions that were then reported as data. I worked closely with the classroom teachers and school administrators to ensure the continued comfort of students, teachers, and parents/guardians with my presence in the classroom.

Children were assigned pseudonyms, which were chosen from a list of popular baby names and assigned randomly. (Names of current students were removed from the baby’s name list prior to random assignment). Pseudonyms do not reflect any personal or demographic characteristics of the children. While children’s real names were used in digital recordings, digital recordings were not stored in the same location as field notes or pseudonym assignments. Field notes were written only using pseudonyms and teacher initials and regularly checked for accidental uses of real names. Data storage to protect children’s confidentiality will be described in further detail in the data collection section. I anticipate that parents/guardians of the children may be able to identify their child, despite pseudonyms, due to the level of detail and specificity necessary for analysis and reporting findings. However, I took great care to be conscious of the implications and image of the portrayal of each child. It is important to remember that this study
is not focused on individual children or their development. It is focused on the social dynamics, interactions, and culture between the children—all behavior happened within a specific context and should not be extrapolated.

**An Atypical Adult: Participant Observation**

In Corsaro’s (2003) work, he detailed his methods for entering the world of children and becoming an “atypical adult.” The beginning stage of his method was to be passively present in the space where children are playing. By remaining passive and not proactively engaging, children recognized this behavior as different from the other adults in the classroom. Corsaro observed that adults often interacted with children by asking them questions. In order to establish that he was not the same as other adults, he waited for children to interact with him. The length of time that it took Corsaro to be viewed as an atypical adult in the classroom setting varied from school to school. Once the children began to interact with Corsaro, he also took care to not behave like an adult in terms of positionality or authority. Children are used to adults managing their behavior and intervening when rules are broken, conflict arises, or the situation is dangerous in some way. He made a purposeful decision to refrain from interfering in conflicts or managing children’s behavior. It was important for Corsaro to collaborate with the classroom teachers to accomplish this so that teachers supervised their classroom as if Corsaro was a student and not an adult.

Corsaro’s methods were used as a general framework for my process of establishing my presence as a non-authority figure. Before the study began, I envisioned that I would try to be more of a wallflower and only engage in building with the children when specifically invited. However, both my own personality and the contextual circumstances of the area altered my approach. I am an outgoing, social person, so remaining silent and sitting quietly on the side was
too unnatural of a feeling for me. Additionally, the rug was not that large so there was really nowhere to sit that would not eventually be in the way of building. Children also appeared to be uncomfortable or confused about why I was not participating during times that I chose to not build or join a group. Due to this circumstance, I did invite children to play with me or directly ask if I could join a group. I tried to refrain from asking questions during the first few weeks, but the block play area requires questions to be asked for building collaboration and material sharing, so instead I tried to limit asking “teachable” questions and stick to social or logistical questions.

I was introduced to children as a researcher that was there to play with children in the block play area as a friend. The children were aware that I would be spending the majority of my time in the block play area. I had not intended to tell the children that I was a researcher, but through conversations with the classroom teachers and my committee, I decided trying to hide my reason for being in the room would cause confusion. It also allowed for transparency with the children about the camera and filming.

In addition to being thoughtful about what I was saying, I also had to consider my body language. Although not always comfortable for my adult/aging body, I was always on the rug sitting or on my belly. There were times when I needed to sit against a shelf or on a big block for the sake of my knees or back, but these were limited moments. I only stood up when necessary to get around the rug (or if we were comparing heights of ourselves or the towers). I watched how children physically interacted with each other to guide what I would allow. Children did hug, lean on, wrestle or sit very closely next to each other. One child enjoyed climbing on me/wrestling, which I was fine with because he also was physical with other children in the same
way. However, children did not sit on each other’s laps, so I did not allow children to sit on my lap—both in the block play area and during any meeting times I attended.

I made a decision to not have my phone on me during observations. I noticed that teachers used their phones a lot for functions of their job, such as communicating with each other or taking photos of children in action. There was a rule in the classroom that children could not have items from home with them when they were playing in the classroom. For both of these reasons, I felt that having my phone on me would undermine my efforts to be seen as different than the teachers.

Although I will describe moments of realizing that I was an insider of the group in the findings chapters, I learned that the atypical adult status was not like reaching a next level in a video game. I was continually trying to reinforce to children that I was “not a teacher” through the year and children’s perceptions of me varied. I wanted to make sure that children were not changing their behavior due to my presence in the space. When children looked to me to resolve a conflict, I would make sure to clearly remind them that I could not help, and they should find a teacher. There were times when children’s safety was at risk, either due to the hazards of building with heavy wooden blocks or physical altercations, that would have been unethical for me to pretend that I was not an adult. Due to this, I did step into some conflicts or remind children about building safety rules. The classroom teachers were very quick to get to the area when there was a major conflict or injury and also helped to reinforce language that I was a “friend” helping my other friends be safe.

The teachers were important partners in establishing my atypical adult status. When they were talking with the children about the members of the classroom, they included me alongside the other children. They spoke to me as they would speak to the children. There was a time when
I was running around (well, slow jogging) the rug with a few children pretending our frame blocks were fighter airplanes. When the teachers asked the other children to settle down and use a softer voice, they included me as well.

**Data Collection**

I completed 87 classroom observations for a total time in the field of 115 hours. The primary source of data for this study was my field notes. Video and audio (digital) recordings were taken during my observations to allow me to be in the moment with the children. Digital recordings were then used to re-watch and complete field notes.

**Digital Recordings of Observations**

My decision to use video and audio recording devices was informed by literature on using this technology for studies involving young children. With the technological advances in cameras, especially the GoPro camera that I used, it has become less intrusive and more financially accessible to use cameras in classrooms (Flewitt, 2006). Researchers have used video recordings, photographs, and audio recordings in place of taking notes or live coding (Fitzgerald et al., 2013). For block play studies, this has allowed researchers to notice more nuanced interactions between children (Cohen, 2006; Cohen & Uhry, 2010). Social interactions between children can happen quickly, be non-verbal, or have embedded meanings. Video recording data provided me the opportunity to pause or watch multiple times in order to see/hear social interactions in finer grain details. Corsaro (2020) believed that video and audio recording support a researcher’s ability to see the complexities of interactions between children, which supports the validity and reliability of findings.

During the first two weeks of the school year, I did not utilize any digital recording device. It was important for children to first get comfortable with my presence, and then get
comfortable with having a camera filming them. In the second week during a morning meeting time, I showed the children the GoPro camera I would be using and talked to them about why I would be filming. The children asked questions and were interested in the device as a toy but did not seem very curious about the actual day-to-day filming or that they would be on camera. There were a few times scattered through the school year that a child would notice the camera and ask about it. I would answer any questions that they asked and remind them they could tell me if they were uncomfortable with the camera. If children were persistently curious, I would tell them to wave at the camera or that I could show them the camera when it was done filming for the day. Children never reported feeling uncomfortable about the camera or being filmed.

**Recording Equipment**

A GoPro action camera and small audio recorder was used for this study. The GoPro camera is small enough to fit in the palm of my hand. The camera has attachments that allow it to be mounted in non-traditional ways. I used a flexible octopus tripod that could wrap around a post in order to get a good angle of the rug. Conveniently, there was a vertical post for the blinds in the corner that I was able to use to attach the camera. The GoPro has a wide-angle lens that was able to capture the entirety of the rug and the surrounding areas. The size of the camera, and that it was mounted above the rug, limited the distraction of recording to children. It was important that they were aware there was a camera and that they were being filmed, but I did not want them performing to the camera or altering their behavior.

I had always planned to use some type of audio recorder but had hoped that the GoPro would capture sound well enough that I might not need to. Unfortunately, due to the volume of noise in the classroom, difficulty of deciphering what children were saying, and facial coverings, the GoPro sound was not always enough. I purchased a small audio recording device that looks
like a computer flash drive. I tried to place it opposite the camera and closer to the children to pick up sound the best. It was not a very high-tech audio recorder, so there were challenges in deciding where to place the device. I tried having it attached to me for one of the observations, but it picked up too much wind noise, which muffled the children talking. Most typically, it was attached with Velcro under the top ledge of the block shelf. I thought about using wireless lavalier microphones and having one on me or potentially a few on children, but it was financially out of range, and I thought would be too distracting to the children anyways. If I were to do a similar study in the future, I would try to find a better audio solution.

**Field Notes**

Field notes were written in a descriptive, narrative-transcription combination. That style was informed by Emerson et al.’s (2011) recommendations for ethnographic field notes. I described what was happening in a narrative way but would include transcribed conversations when the specific words children used seemed relevant. There were some field notes that were written in more of a summary style, due to limitations on time or failing video equipment. All field notes were written in my home, for practical and privacy reasons. Most field notes were written the same day as the observation, but a small portion had to be written later because of various constraints.

Emerson et al. (2011) advised to focus field notes on the “what” and “how” rather than the “why.” Focusing field notes in this way supports a more systematic documentation of routine actions. I followed this advice when deciding what to include in my field notes. I wrote the field notes in a present tense voice, as if I was a sports announcer. This helped to limit including any reflective thoughts or assumptions about intent.
I had originally planned to utilize jottings, which are quick, shorthand notes, even when I started video recording the observations. However, having a little note pad on me, and remembering to write things down, were cumbersome and took me out of the moment. If there were stand-out moments that I wanted to make sure I described in detail in my field notes, I would type it in my Notes app when I got back to my car after the observation so that I would not forget.

Included in the text of field notes were also theoretical, methodological, and personal notes. Each type of note was color coded and labeled so that it was not confused with field notes. Theoretical notes tracked my thinking about observations and emerging patterns. My theoretical notes were an early type of analysis and I sometimes referenced theoretical notes from prior observations. Methodological notes were used to track challenges, problems, or modifications that happened while in the field. For the most part, these notes were about technological failings, but I also wrote about the atypical adult process and explanations for decisions I made. Personal notes were used as a layer of context of my own behavior. I did not write a lot of personal notes, but I noted times when I thought I was acting or reacting a certain way based on external factors. Personal notes helped me to better interpret the meaning of some moments.

Teacher Interview

I conducted one interview with the teachers as a group at around the mid-point of the school year. I decided to do the interview as a group because the teachers worked as a unified team. The main questions I asked in the interview were to give me more context about classroom rules, culture, and procedures. The interview lasted about an hour. I felt that I got all of the information that I needed in the interview and never felt another interview was necessary. I also was able to chat with the teachers before children arrived on most observation days, so if I had
small things to ask about or clarify, I used those opportunities rather than a formal interview. The teacher interview was not used as a primary source of data for analysis.

**Data Storage**

Confidentiality was a top priority. All data was stored with the goal to minimize the potential of data being lost or seen. I had two external hard drives. One hard drive held all of the video files, both raw and iMovie mp4s. It also had the audio files. The other hard drive had field notes. I kept a list of pseudonyms and real (first) names on my computer so that it was not stored with other identifiable information. Field notes were backed up to a secure cloud during data collection and observation but have been deleted from that location. The hard drives were kept in a locked cabinet in my home. Video and audio files were deleted from the device once they were confirmed to be saved on the hard drive. I was the only person to watch the videos.

For analysis, I used a Qualitative Data Analysis (QDA) software, NVivo. Field note files were uploaded to NVivo. NVivo has built in safeguards for the security of data. The NVivo software was installed on my computer, but the project file was saved on the same hard drive as the field notes.

**Data Analysis**

Data analysis began after the completion of data collection and fieldwork. I modeled my analysis structure based on the advice of Emerson et al. (2011). I utilized an approach where analysis happened in a series of phases, although some phases blended into the next or were repeated. Each part of the analysis supported a comprehensive and systematic analysis of the large quantity of written data from field notes. Using this approach increased the validity and reliability of codes, patterns, and themes. QDA software was used mainly as an organization system for codes. I did not run any further analytic processes with the software, but I did use the
text search function. Field notes, including theoretical, methodological, and personal notes, are the primary source of data that were analyzed. Analytic memo writing was used during all of the phases of analysis to organize my thoughts and collect excerpts.

The entire analytic process was one of analytic induction. This confined and focused me to only making claims based on what the data said and what the data allowed me to say. Analytic induction is essential to staying grounded in the data. Analytic induction involves searching out contradictory evidence or negative cases to refine and modify theoretical explanations (Emerson et al., 2011). Charmaz (2014) described this style of an analytic process allows for open-mindedness to the data to discover “subtle meanings and have new insights” (p. 137).

The first phase of analysis was a read through and index coding. I decided to read through the field notes chronologically. I wanted to watch how the year unfolded and thought I would lose important context by looking at field notes as independent documents. Index coding was open and meant to organize data into thematic categories. Although not fully eschewing everything, I put theoretical knowledge aside so codes would not be constrained or limited. As codes were created, I used the text search function on NVivo to apply new codes to prior field notes.

I did not want to limit the themes that would emerge from the data, so I allowed the list of codes to be as long as necessary. I followed the direction of Charmaz (2014) to code data as actions. Charmaz explained that coding for action reduces the tendency to code for types of people. Periodically, I edited the code list to combine codes that were redundant, or re-name codes to better fit the category. I tried to use code labels that were emergent from the data. For example, there was a code called “No! Don’t! Stop!” that was used to categorize when children were trying to stop someone’s behavior or actions. The purpose of doing code labels this way
was to keep my analysis grounded in the data. As I coded, I also reorganized codes into bigger categories and added subcodes.

Literature on ethnographic analysis often recommends line by line coding to get a finer grain look at the data after a more broad coding (Charmaz, 2014). However, I did not choose to do line by line coding because I felt that I had reached saturation with the thematic codes already created. I did not think that line by line coding would give me a different perspective on my data at that point. Returning back to prior field notes to add new codes, similar to a constant comparative method, allowed for similar fine grain viewing of the data.

In the next phase, I used focused coding. During this process, initial codes were distilled into larger category groupings. Charmaz (2014) advocates that focused coding allows a researcher to evaluate the directions being taken in analysis without going too far in a direction that cannot then be adjusted. In other words, it allows for flexibility to adjust, rearrange or re-think codes that have been applied without having to start over. I began this process in NVivo by grouping “parent” codes together under larger umbrellas and creating new groupings from codes and subcodes. Then, I began creating outlines in Word documents to identify patterns that were emerging. The structure of the outline was similar to an outline that might be used to structure a paper. I added data excerpts as I filled out the outline. Using an outline was a great visual to see places that I had a lot of data support and where I was lacking. When I could not find enough data for a particular part of the outline, it indicated that it was not a viable part of the pattern.

I chose the pattern topic of the outlines based on what was jumping out at me in the focused codes. I created eight analytic outlines. Some of the outlines I only got a short way into before realizing that the pattern I thought I was seeing was not actually there or was not
substantial enough. The outline process helped me to work through finding meaningful patterns that were fully connected to and grounded in the data.

During the outline process I also looked for negative case examples. Two important components for ensuring the findings are accurately representing the data are identifying alternative explanations and negative cases. Negative cases and contradictions are part of analytic induction and remaining locked into the data (Emerson et al., 2011; Charmaz, 2014). Negative case identification is finding instances that do not fit the broader patterns yet are exceptions that “prove the rule.” Negative cases support the validity of findings. An example of a negative case was finding an instance of two children who typically were adversaries excitedly choosing to build together and collaborate during one observation. By reflecting on the codes and comparing them back to the data, the tension of codes that did not fit certain observations pushed me to consider why. Validating that the findings are grounded firmly in the data is important for demonstrating rigor in the study.

Rigor

The rigor of ethnographic studies should not be judged by the same criteria that would be used for quantitative, or even other types of qualitative inquiry. The greatest strength of ethnographic methods is the extensive time spent immersed in the field and large quantity of thickly described data that is generated. The methods for data analysis outlined above have the goal of effectively using the benefit of quantity without drowning in a sea of words or getting lost in the weeds. The goal of these analytic methods was to construct an account of the data that meets the threshold of theoretical validity. Deterding and Waters (2018) explained, “A theoretically valid explanation is an ‘abstract account that proposes to explain what is observed,’ where concepts and their relationships have a strong basis in the data.”
Through index coding, comparing codes back to prior field notes, focused coding, and creating outlines, there was a balance between exploring the data from a broad view and intensely detailed fine grain. Validity and reliability of findings were baked into the analytic methods. As mentioned above, during each phase, the way data were organized and examined was deliberately structured to increase consistency of code application and systematic development of patterns and themes. The analytic approach also strengthened my confidence that saturation was reached.
CHAPTER FOUR
JOINING

To be able to build together socially, children have to figure out how to join. With children arriving at school at different times, children typically arrived at the block play rug individually. So, except for the first child on the rug in the morning, everyone else had to join in, or build by themselves. Children developed strategies, including verbal and nonverbal, when attempting to join building on a structure-in-progress. Children have been primed on joining strategies from home experiences and guidance from teachers about socially appropriate ways to join (Corsaro & Molinari, 2000). Strategies were chosen, adapted, and reinforced through feedback loops. Children also experienced being joined by classmates arriving at the rug. Similarly, there were reactions and strategies utilized to manage the root challenge: wanting to include their peers while also wanting to protect their structure and building plan.

Rules and Agreements

Rules are an important background context for the ways in which children join or navigate being joined. In every classroom, teachers set rules for behavior and boundaries. Since preschool classrooms are often sectioned into specific activity areas, there are typically additional rules that are applied to specific areas of the classroom. In the block play area, typical types of rules include limits on the quantity of children allowed, sharing or usage of materials, sharing or usage of space, and safety considerations. In this classroom, teachers did not have set limits on how many children could be in the area at one time; they used a case-by-case subjective approach to decide when the block area seemed too full. That determination was usually
influenced by noise or safety considerations. There also were not set rules about how many materials could be used or how much space could be taken up. However, the overarching community values were used to guide children’s behavior when teachers (or other children) determined that materials or space were being overused. In these cases, teachers might support the negotiation or conflict. There was a set rule about how tall structures could be, which was up to the child’s shoulder. This rule is based on safety because wooden unit blocks are heavy and could injure a child if they fall from too high of a height. Finally, there was a rule about what type of activities children could do in the block play area, which will be discussed in further detail below. In short, children were only allowed to be doing things directly connected to building or playing with a structure; running around (or twirling around) with stuffed animals was not an acceptable use of the space and teachers reminded children of this when they observed it happening.

The importance of discussing rules in the block play area is that they play an essential role in how children navigated the social dynamics of joining. Corsaro (2003) uses a term, borrowed from anthropologist Goffman, called “secondary adjustments” to label the ways that children alter or adapt rules set by teachers to fit their needs. In both joining and being joined, children sometimes cited rules that sounded like they could or should be a rule but were not actually an explicitly stated rule by a teacher.

Throughout the year teachers created or reinforced rules (agreements) about joining or welcoming someone to join. Similar to the general rules for the block play area in this classroom, there were no concrete rules about joining, such as allowing only a certain number of children to build together at a time. Most rules, which were often referred to as “agreements” in this classroom, were based on the overarching culture of inclusion, community, and being kind to
each other. However, in this classroom, agreements could also be used in a more temporary way. In other words, children could make agreements with each other that are for that moment or situation. In Visit 14, Teacher helped to resolve a conflict between Ethan and Asher that happened when Asher tried to join in building.

Teacher tells Asher that Ethan is upset because they worked very hard on the structure, and they don’t want it to get broken.

Teacher: I think that we need to make an agreement that to join playing with things that you cannot knock things down on purpose?

Lucas: (talking about the moat wall) I don’t think I can keep up the wall much longer! Asher, you keep using the wall. I’ll guard the house.

This agreement recognized the concern that Ethan had about allowing someone new to build on his structure, but also trying to help Asher to join. To adults, this may seem to be an obvious rule: if you want to join people in what they are doing, you should not destroy anything. Yet, for children of this age, there is a less defined line between helping and destruction.

As mentioned above, another rule that was reinforced with some regularity was that the rug was for building. In other words, if children were doing something other than actually using blocks or materials to create a structure, such as rolling around on the carpet with stuffed animals, they would need to leave the rug. In Visit 23, Amelia, Hazel, and Greyson were interacting, but not with any blocks.

Amelia, Hazel and Greyson arrive at the block play area, get on all 4s and bark like dogs. Amelia asks if they can play with me. I tell them of course, but remind them that if they’re on the rug, they have to also be building (per teacher stated rule). Greyson grabs a wooden panel. Amelia and Hazel take out the mini log basket. Amelia and Hazel stack up the mini logs, while barking, trying to balance a stack.

In this example I am the one reminding the children about the rule. Usually, the reason I would remind children about this rule was because they were in some way interrupting or disrupting my ability to build or join in building. This example demonstrated how children
would adapt to the “must be building” rule to still be able to play with their stuffed animals in the way they wanted. Corsaro (1985) similarly found children would employ strategies to evade adult rules to engage in restricted behavioral routines. In Corsaro’s research, it was older boys trying to engage in gun play, despite the teachers’ expressed restriction engaging in this behavior in the classroom. The children in his classroom switched from playing cowboy and army, where humans are shot, to playing “hunters,” in which humans are not the targets. In this instance, when children were reminded that the block area was for building, children would get out a minimal amount of building materials to qualify as “building.” Children were allowed to play in and around their structures, so by having some semblance of a structure, they were now building rather than “just playing.” There were cork donuts that resembled a bird’s nest, so frequently the children wanting to play with the stuffed animals would set down “nests” and then move around the rug pretending the birds are flying in and out of their nests. At times, teachers would strongly encourage the children to expand their nests or “habitats,” which signaled that they were not meeting the minimum requirement of “using blocks.”

Having rules about children’s agency over their materials and structures created the foundation for processes related to joining and children’s strategies for protecting their building. Early in the year it was established, through teacher reinforcement and support, that a child could decide if they would allow another child to join or use something they built. In Visit 16, Teacher supported Asher to stop Mason from putting something on his block, which was being used as a boat.

Asher is using a rectangular big block to be a rescue boat with his one panda on top. Mason tries to put his panda on top also. Asher pulls the big block away and Mason grabs it, still trying to put his panda on. Asher pulls a big block away from Mason, right in front of where Teacher is sitting. Teacher asks Mason what’s going on and Mason says he wants to put his panda on the rescue boat. Teacher explains this to Asher. Asher tells
Teacher that it’s a rescue boat for just one person. Teacher asks if he is saying that there’s not enough room on the boat and Asher confirms. Mason is upset next to Teacher and Teacher explains that it is Asher’s choice to have just one panda on his boat. Asher pushes his boat around the rug.

It is important to note that Teacher’s response to this interaction might have been different had Asher already been allowing other pandas on his boat, as exclusionary behavior would have come into play. When children labeled a block or a structure, it became something more than just a block or material. The “boat” that Asher was pushing was really just one big block with a panda figure on it. There were no other structural elements to distinguish the block as a boat. By identifying the block with a label, such as a rescue boat, Asher had the agency to put a limit on Mason joining.

**Verbal Joining**

It is very common to hear a preschool teacher remind children to use their words when the teacher is supporting social interactions. At this age, a child’s vocabulary is growing quickly, so they can start to put words to their internal emotions or thoughts. During social play, children are encouraged to ask if they can join and communicate their thoughts and feelings verbally.

*“Can I Join?”*

The most basic way of joining was to directly ask to join. In my classroom, a child asking to join directly was quite a common strategy for joining. Sometimes a child would ask to join a group, but it was more common for a child to ask one individual to join, even if that child was building with a group. In Visit 35, Asher came back to the rug after doing another activity.

Asher returns. Asher says, “Lucas, can I play?” Teacher asks Lucas if he can tell Asher what they’re playing.

In Visit 43 Mason asks to join.

**Mason:** Can I build with you?
Liam: Sure!

And in Visit 72, Asher wants to join Lucas.

Asher: Hey, Lucas, may I play with you?
Lucas: Yes.

Asked and answered, children have a clear and straightforward message about joining.

The emphasis on children verbally requesting to join was coupled with an equal emphasis from teachers on a positive, welcoming response from the child being asked. In Corsaro’s (2018) work, he reported that he observed direct strategies for joining to be rare. Corsaro explained that children did not use a direct strategy often because it called for a direct response, which was typically negative (p. 167). One potential reason why my findings were in contrast to Corsaro’s could be the physical structure. Children are incentivized to allow others to join because more builders are beneficial to being able to make a structure faster or larger. Also, children do not have to guess what is being imagined because they can see it with their eyes.

Additionally, when a child joins building, the structure creator might feel concerned about what the joining child might add or remove, but they do not need to incorporate a new story or character. In pretend play, a joining child needs to have some type of role. Children have to reconsider the story they are telling to include the new character. Whereas, in the block play area, if a child is building a type of structure, they do not necessarily need to change what they are building or what they are pretending to incorporate someone new because the joining child can have a generic job of helping to build. They do not yet need to have a role in the imaginative narrative.

While receiving a direct “no” response was rare, there were times when a child asked to join and did not receive an immediate response. If a child asked one particular person if they
could join, but that person did not respond, children would either ask again, or ask another person in the group. During observations, my perception of when a child asked to join and did not get a response back was that it was intentional ignoring, with the goal of not allowing the person to join. However, after examining the episodes of children not receiving a response to a direct request to join, I do not think the children trying to join perceived it as intentional ignoring or a concrete “no.” The evidence for this interpretation of the children’s perception is that children did not react to a non-response with heightened emotions. In Visit 50, James wanted to join the building with Ethan and Logan.

James gets to the carpet. James sits down next to me. [Ethan and Logan are building together.] James goes up to Ethan and says, “Can I play with you?” Ethan doesn’t respond and James asks Logan, “Can I play with you?” Logan and James have an interaction.

In this example, James did not raise his voice and calmly asked another child building in the group. It usually took at least 3 or 4 non-responses for a child to raise their voice or try to get the other child’s attention in a different way. This calm reaction cannot be attributed solely to a child’s laid-back personality. There were plenty of other times when a child was being ignored, not while asking to join, and emotions would ramp up quickly. Particularly if one child was asking another child for a certain material and was not getting a response.

“Do You Want Me to Help?”

There were other indirect verbal ways that children requested access beyond directly asking to join. These strategies focused on the structure as a reason for joining, rather than just wanting to “play together.” One version of this strategy was to ask what their job was for construction. When a child asked what job they could do, they presumed they would be welcome to join. In Visit 61, Mason, Amelia, and I had just started building together when Ethan got to the
rug. Ethan arrived at the rug and said, “What can I do?” I asked if Ethan wanted to build a part of ours or build his own thing.

Asking for a particular job was a strategy I utilized early on to get children to include me in building. When I just asked, “Can I build with you?” I might get a yes, but then I would sit there and was not really included in planning or design. When I asked for a more specific role, the responses were typically more actionable. It even led to a running inside joke of Ethan, Logan, Asher, and Lucas telling me to build the kitchen. In Visit 13 I ask for a job to do.

Ethan is looking over at Asher and Elijah at the clay table. He stands for a while watching. I ask him if there’s any jobs he wants me to do.

**Ethan:** You can… you can make the kitchen.

**Me:** The kitchen?!

**Ethan:** Yeah.

**Me:** Why does everyone always tell me to make the kitchen?

Asking what job to do is different than asking for a role in pretend play because building jobs are more standard and not as connected to the pretend aspect. As in the example of me being in charge of making a kitchen, this type of structure could (and would) be included in most of the structures that were being built. Children could also be told they could build a basic part of a structure, such as a wall, which does not necessitate knowing anything about what type of structure it is.

Similarly, someone might ask if the builders needed help. Asking if help is needed is less of an assumptive question, so it may feel like a less imposing interaction. But it is a question that can be answered with a simple yes or no, compared to the open-ended response for what job can be done. In Visit 33, Ethan asked Lucas if he needed help building.

Ethan gets on to the rug and says, “What, do you want me to help? You need help?” Lucas says, “Sure, we’re trying to make a hotel in the middle of the ocean. And there’s big waves, somewhere you’ll see big waves.”
The success of the strategy of asking if help is needed appeared to be conditional on the type of help the builders needed. In other words, a child’s building resumé was considered. Some children specialized in certain types of structures, such as Liam using the XL unit blocks vertically to make a tall tower. Some children were great at making tracks or acquiring materials for decorations/interior design. My resume included my ability to carry more of the heavier blocks and quickly get the foundation or base of a structure built. For children with a resumé that included frequent (accidental) knock downs or structural instability, their offers to help were accepted less.

“What Are You Making?”

The least direct verbal strategy for joining was to inquire about the structure being built. Children would sometimes start by saying, “What are you making?” before asking to join. While the main purpose was to use it as an entry into asking to join, one purpose this served was for children to decide if they wanted to join or not. In Visit 32, Logan arrived at the rug where Greyson and I were building together. (This was early in the morning, so no one else was on the rug building yet.)

Logan takes out the brick basket. Greyson had added two XL unit blocks on the floor and put carpet squares along one of them. Logan asks, “What are you guys making?” I tell Logan I’m not sure and defer to Greyson. Greyson says, “Spidey car.” Logan says he doesn’t want to make something with spiders. I ask Greyson if he meant spiders or spiderman. Greyson tells me about radioactive spiders. I ask if we are making something for radioactive spiders. Logan doesn’t want to continue building the spider structure because he doesn’t like spiders.

Greyson was not as regular of a visitor on the rug, and when he was there, often played with Sofia, Hazel, and Scarlett. Logan did not have an expectation or prediction of what Greyson would be choosing to build. If Logan had asked if he could join directly, or if he asked what job he could do, he might have felt worried that he would be stuck building something he did not
want to build, or not having the control over what he was going to build. (I have reason to believe that Logan was not opting out due to a dislike of talking about spiders, radioactive spiders, or Spiderman, because on prior and subsequent occasions, these were topics that Logan and I discussed at length.)

The response of the child(ren) being asked what they are making also served the function of indicating to the asking child whether or not they were being welcomed in or rebuffed. It was evident that other children were understanding that as a request to join because sometimes instead of responding with what they were building, they responded with resistance. In Visit 29, Asher asked Lucas and Ethan what they were building, and Lucas responded by telling Asher that he could not join them.

Asher walks up to the carpet.

**Asher:** Guys, what are you building?

**Lucas:** Asher, Asher, we want, me and Ethan, we want to build by ourselves.

Asher goes to the panda basket and gets out a panda. Ethan and I are discussing building plans.

**Lucas:** [sticking his arm out in a “blocking” way] Asher, you can build your own island.

**Asher:** Well, I can’t build an island. I want to build on your island.

In this example, Asher had not asked Lucas or Ethan whether he could join them in building—he had simply asked what Ethan and Lucas were building. However, Lucas responded to Asher’s inquiry as if Asher had asked to join. Asher demonstrated that Lucas’s interpretation of the meaning of Asher’s question was correct by not repeating his question and rather re-affirming to Lucas that his intention was to join. It makes sense that this strategy would have a lower success rate because a child joining this way would need to be incorporated into the imaginative component in addition to doing a building job. The question of what is being built is
also not answerable by a simple yes or no, so it is more cognitive effort on the child being asked to be joined.

**Non-Verbal Joining**

Identifying what verbal strategies children are using to join was more or less straightforward to detect. However, non-verbal strategies children used involved a more nuanced understanding of body language and intentions. I distinguished between when a child was trying to use their body or movements to join, versus when they were simply in each other’s space.

**Getting Close**

One way that children joined without any discussion was to get in close proximity to the structure and other children who were building. The child wanting to join might then jump into the discussions about the structure or building plan. Or they might just sit and watch/listen, waiting to be invited in. Children used this strategy throughout the school year. In Visit 12, Logan arrived at the rug and sat down next to the structure Lucas was building.

Logan walks into the block play area and sits next to the structure. Lucas is telling Logan about the structure.

Similar to this interaction between Logan and Lucas, sitting in close proximity to the structure might not require the child to do anything else to join. In other words, the child’s presence was their way of initiating joining, which was understood by other children. Just because a child was sitting close to the structure did not guarantee either a response or interaction.

There is evidence that children interpreted a child sitting in close proximity as a request to join. Similar to the indirect verbal strategies, without being directly asked, “Can I join?” the
child building might tell the child trying to join that they do not want help. In Visit 26, Charlotte was looking to join building with someone.

Charlotte goes over to where Hazel is building and sits down next to her structure. Hazel also said she does not want help. Charlotte’s shoulders sag down.

In this situation, Charlotte did not ask Hazel to join, but Hazel still responded as if Charlotte had asked directly. The meaning of sitting near a structure was shared. There were even times when a child would sit near me and, without that child asking anything, I would tell them that I do not need help or that I am building by myself.

Corsaro (2003) also found children utilizing strategies for what he termed “nonverbal entry,” to join. However, Corsaro’s description of how children utilized nonverbal entry is more active and layered, with a child encircling an area, picking up an item, and eventually following up with a verbal strategy. In block play, I think that the reason this non-verbal joining could be more passive and still effective is because of the physical structure. In dramatic play, there is not necessarily a physical item or location that is the central focus of play. A child would need to be more active and encircle the area to find the locus of the narrative. In block play, children can know exactly where to put themselves physically to non-verbally communicate their desire to join.

Adding On

Another way of joining was to add on to the structure without any prior permission, invitation, or agreement. Adding on was a common strategy. However, adding on was very often not well received by the child whose structure was being added on to. It is important to distinguish “adding on” versus destruction. Removing blocks, taking materials away from other children, or intentionally knocking blocks over are not included in “adding on.” However,
children who are building might not make that distinction between someone trying to be constructive versus destructive. In Visit 5, Asher wanted to join Lucas building.

Asher is trying to add to the structure, but Lucas tells him in a loud voice that the blocks Asher is trying to add do not go in the place he is trying to put them.

Joining by adding on, without conversation, sometimes incited a panic-type response from the child building. By responding loudly, the child is trying to stop what they are perceiving as an attack on their structure and building plan.

Strong social connections were not always enough for a child to receive a positive reaction, or even a neutral reaction, to joining by adding on. For example, Amelia and Rylee played together most of the time and were typically very inclusive and protective of each other. In Visit 86, Rylee tried to join Amelia by adding on blocks.

Rylee is sitting next to Amelia’s structure, gripping her legs. She starts taking colorful small cubes out of the basket I am also using. She places the cubes on top of Amelia’s structure. Amelia calls out Rylee’s name and tells Rylee that it is her structure and she doesn’t want anything on top. I tell Amelia that I think Rylee just wants to build with her. Rylee tries to add blocks on the side and Amelia tells her no again. Rylee looks down into her knees with a pouty-looking face. I ask Amelia if there’s any part that Rylee can add on to. Amelia leans over by Rylee and they discuss the structure. Rylee gets out bricks as Amelia is continuing to talk to her.

Rylee was upset because she expected for Amelia to welcome her to build together, but Amelia got protective of the structure she was building. However, Rylee and Amelia were not very frequent visitors to the block play area, and when they were, they were often already together. They did not have the ongoing experiences of joining each other that could have built trust, or at least a predictable routine. Children that were “regulars” were used to building together and joining was more expected. In Visit 15, Logan added on blocks without prior approval. My field notes said, “Logan arrives at the rug and starts adding to Ethan, Mateo, Asher and Lucas’s structure right away.”
Not only did Logan regularly join building with Lucas and Ethan (less frequently with Mateo and Asher), but they were often continuing a building theme, specific structure, or narrative from previous days. Logan arriving and adding on immediately was viewed as a member of the work group showing up, rather than an intruder who might disrupt building. This is also a unique feature of having a physical structure compared to pretend play. Even if children pretend the same scenario day after day, they still have to develop the scenario with dialogue and establish who is playing what role. When children rebuilt the same type of structure, the building routine did not need to be re-invented.

Adding on was most successful for joining when the structure was in its infancy. Without discussion about building together, one child would put blocks or a panel on the rug and another child would grab materials and add on. In Visit 69, Emma joined Sofia building as Sofia put down her first material.

Sofia arrives at the rug. Sofia takes out a panel, Emma takes out a cylinder block. Sofia puts the panel on the carpet, Emma puts a cylinder block in two corners of the panel. Emma gets a grass square. Hazel joins and also gets a grass square. Hazel watches where Emma puts her grass square and then places hers next to Emma’s. Sofia helps to adjust the grass squares.

When Sofia arrived at the rug, Emma had been talking to me about her bracelet and had not even made eye contact with Sofia before she went to the shelf to grab the cylinder block. When Emma added on, Sofia did not seem confused about what Emma was trying to do—they both understood that Emma wanted to join Sofia in building. Since the structure was not yet fully conceptualized, adding on posed a lower threat to the original builder’s plan if they had one.

Most children seemed to have a particular type of structure in mind, such as a castle, but in this stage the structure type could be more flexible, such as a birdhouse castle or castle-hotel island.
Invited to Join

Instead of the new arrival asking to join, sometimes children were invited to join in building. The distinction I am making here, compared to a builder allowing someone to join, is that the builder sought out their classmate specifically or made a verbal request for help building. At times, teachers would ask a builder to invite another child to join them, but because the builder was prompted by a teacher, I am not including that as a true invitation to join. In Visit 54, Ethan arrived at the rug and Lucas invited him to join in building.

Lucas and Logan are working on building outside walls of a rectangular shape on the north west side of the panels. Ethan arrives on the rug. Lucas tells him, “Ethan, we’re making a new one. Want to help?” Ethan walks to the block pile and picks up an XL block. Logan says, “And I’m making the walls!” Ethan hands the XL block to Logan and Logan thanks him.

Lucas’s invitation was clear and direct. Ethan was able to join and immediately jump into helping and building. Invitations to join were not limited to children arriving at the rug. An invitation to join was sometimes extended to someone who was not currently on the rug. This was particularly the case for strong social connections, or not being interested in joining with the children currently on the rug. For example, if Jackson arrived first to the rug, he always looked for Mateo to arrive to call him over to build together. In Visit 59, Mateo arrived and was near the rug where Jackson had started building.

Mateo walks by the carpet and Jackson waves him over. Mateo walks over by Jackson. Mateo and Jackson talk for a moment. Mateo goes to the north shelf to get some blocks. Jackson gets a grass square. Jackson goes to the north shelf with Mateo and they consult over which triangle frame blocks to take.

Seeking out another child who was not yet building on the rug demonstrated that for some children, when they were thinking about their structure design and building plan, they were
not just thinking about the materials or physical structure. Children were incorporating other children into their thought process.

Just as there were indirect ways of asking to join, inviting another child to join also had indirect methods. The indirect ways of inviting someone to join mirror the joining strategies. One method of invitation was to tell the arriving child what they are building. For example, in Visit 32 Luna arrived on the rug and Logan told her about his structure.

Luna walks up to the rug. Logan tells her we are building a “Spidey force.” Luna says, “I don’t want to help you build that, really, I want to build, like, another building.”

Luna interpreted Logan’s sharing of what is being built as an invitation to join, which was evident by her declining and choosing to build something else. Telling a new arrival what is being built also signaled to the new child that they will get a positive response if they ask directly to join. In Visit 86, I told Lucas about what I was building.

Lucas arrives on the rug. Mateo adds a panel on top of his X blocks. I say to Lucas, “Lucas, I’m building a castle!” Lucas asks if he can build with me. He already has two panels in his hands. I tell him he can add onto the side of the castle and he places down one of the panels right up against my structure.

Seeing Lucas holding panels, I knew he was looking to build with someone. Telling Lucas what I was building served as an enticement to try to get him to build with me because I was building alone at that moment. Children also sent the message that they wanted another person to join by handing that person a block/material or asking them to retrieve something. In Visit 12, Hazel, Sofia, and Greyson invited me to join by handing me a stuffed animal.

Hazel, Sofia, and Greyson get stuffed animals and hand me one, too. Sofia and Hazel have small birds, I have an eagle, and Greyson has a beaver. We sit in a circle together and play with our stuffed animals.

There was no prior discussion of the three children asking me if I wanted to join them, or even a discussion of what they were playing or building.
Being Joined

Joining is a two-way street, so to speak. Children have to make a decision about allowing another child to join, even if the decision is to passively accept that they are being joined. In the above findings, there were examples about how children wanting to join attempted to get a positive response and join successfully. Being joined involves children dealing with a potential threat to keep control of building and playing what they are playing. A new child joining, regardless of the social connection, represents a threat. In an effort to protect their play, children used methods to control, or gatekeep, their structure and play.

In our classroom, children were expected to be inclusive and welcoming to their peers. So, children could not be outright exclusionary to their classmates, at least in view of the teachers. I do not mean to make it seem that children were only concerned about being inclusive when the teachers were around, there was evidence that children believed in the cultural value to some extent. But, getting in trouble with the teachers was also a visibly motivating factor. Children’s strategies for gatekeeping were developed within this context.

“You Can Join If…”

Children attempted to manage a new child joining by giving conditions to fulfill their need for the control to keep building what they are building. When children are utilizing this strategy, they are creating a social contract. A child trying to join will be granted access as long as they do not violate the conditions. Children are well versed in this type of conditional negotiation because adults use this same strategy very frequently. Parents might tell their child they can have dessert if they finish all of their vegetables. Teachers might tell children they can use a certain classroom material if they treat it carefully. Corsaro (1994) explained that teachers, across vastly different preschool settings, modeled social control strategies, such as “if-then”
constructions, when trying to manage children’s behavior. Since children have so many experiences with this, they also know that they can revoke access if the conditions are not met, which gives them power.

There are two components to a block structure: the design and the narrative. While the design is easy to monitor because you can see what is being built, the narrative is harder to control because it can be within someone’s mind. To ensure that the narrative would continue, children confirmed that the joining person was willing to go along with the structure or play narrative that was already happening. In Visit 20, I asked Logan to join him building.

Ethan says, “Are you ready, Logan? To shoot the lasers?” I lay down on my belly towards Ethan and Logan’s structure. I ask if I can play and then ask if I can put some of the mini logs on top. Logan says it’s okay, but that I have to be a panda. I tell him that’s fine and I will get a panda in just a second.

Logan and Ethan were playing with the plastic pandas in their structure, and it was important to them that I did not disrupt what they were doing by having new ideas about what was happening or interrupt their storyline. The children trusted that I would go along with their instructions because I had repeatedly demonstrated my willingness to follow. However, for some children, the conditions for joining were more strict, specific, or restrictive, based on social connections and reputation.

Conditional access was very dependent on the trust and history of interactions between the child wanting to join and the child granting access. Children’s perceptions of who was trustworthy were not always based in reality, and grudges over minor discretions were remembered. This is a pattern that children have undoubtedly experienced in their interactions with adults. Not always in a punitive way, but an adult might tell a child that their bedtime has to be at a certain time because they get over tired if it is any later. In our classroom, the stuffed
animals were removed from the block play area proximity because children were using them for non-building purposes too frequently (which children were told when they asked where the stuffed animals went). Children reproduced this conditional access, and it was accepted as legitimate by their peers.

Another type of condition for joining was that the person joining agree to build, or not build, in a certain area or make a certain type of structure. More than just design, this type of condition involved protecting territory and controlling material usage. This was tricky to negotiate when children arrived at the rug with their own ideas and had to then decide if they were willing to amend their plans to be able to join. In Visit 41, Rylee wanted to join building on a structure (a castle with a dungeon and secret passageway) that Logan, Lucas, Ethan, and I had been working on before Logan got called away by the teachers to work on a project.

Rylee walks onto the rug. She walks around the back side of the structure and then comes back around the other way. Rylee wants to join the group and stands next to me. I tell her that we are building a castle. She wants to build on the grass squares that Logan has designated the backyard and told me that he didn’t want anything else on the grass. I tell her she could build her own part and point to a section of the structure that I think she can add on to. Rylee gets out two grass squares and places them next to the structure. Rylee adds some blocks onto her grass squares.

Later in this visit Rylee was building and adding materials to the grass square I had told her not to build on. A negotiation had to occur to remind Rylee of the agreement she made when she joined us building. It was common that joining agreements had to be repeated or reminded, potentially escalating to a conflict that required support or intervention by teachers.

“You Need a Passport”

Consistent with the “if-then” construction of conditional access, children also used the blocks and materials as the condition for joining. One type of strategy was requiring some type of access material, code/password, or passport—which often were extremely vague or extremely
pecific, elusive, very limited, or unattainable. Blocks and materials were frequently used as the “passport,” which was often left to the child wanting to join to figure out which block or material was required. Who needed to have a passport could also be contingent on social status, interactions, or characteristics. In Visit 22, Luna wanted to join Logan and Lucas and they responded to her that she needed a passport.

**Logan:** [turning towards Luna] If you build with us, this boat is only for boys.
**Teacher:** Oh, that doesn’t mean she can’t build with you.
**Me:** I’m a girl.
**Teacher:** Me too, I’m a girl.
**Lucas:** No, girls can, but to get in there, for you, you just need a passport that looks like this. [Picks up a small block, holds it up towards Teacher].
**Me:** Just girls need a passport?
**Lucas:** Um, yes.
**Teacher:** Huh.
**Lucas:** No, no. Everyone that comes in needs a passport! And it looks like this. [Holds up the same block as before]

This interaction went on to the teacher discussing in more depth with the children about inclusion and gender. It was harder for children to use the passport/password gatekeeping strategy when teachers were around because the access criteria were often illogical or unreasonable. Children might require a passport/password for “visitors,” which meant children who were not involved in building the structure. This was typically a collective decision, rather than one person setting the conditions for joining. This type of passport requirement happened more towards the end of a structure’s construction and children who wanted to join were not looking to add on to the structure, they were looking to play on or in the structure.

The use of a passport was interesting to me because having a passport, or even being given a play passport, is not common for young children, especially as COVID has limited international travel. While I suspect, based on hearing about travel plans, this group of children had more frequent international travel during the school year than might be typical for this age, I
think there is something more broad at the center. Corsaro and Eder (1990) described cultural routines, a central element of an interpretive reproduction theory, are developed by children experiencing social knowledge that they do not fully grasp that are then later reproduced and readdressed in activities and routines of peer culture. In current social culture, adults commonly need some type of badge or document to gain entrance to spaces or activities. Especially in the times of COVID when a vaccination card was required for entrance. At this school, parents have their own ID badges that can be scanned and used to get into the school. For children, the nuances between the types of documents/items presented to gain access to spaces or activities are not fully understood; passports are generally not required to enter castles, houses, or hotels. This cultural routine has been produced and reproduced using some experiential knowledge and repeated social interactions and negotiations, turning it into a familiar strategy for moderating access of joining.

Children might put a specific criterion of who was allowed to be included, similar to requiring a passport, but directed at personal characteristics. Unsurprisingly for anyone who has been around preschool aged children, gender was a criterion used. For example, in Visit 20, Logan gave the requirement for joining building his hotel.

Logan turns to me and says, “This is our hotel and it’s only for boys that are four year olds.” I say, “But, like, I can come play, right?” Logan says, “Yeah.” Rylee says, “And I can play also!” I say, “And Rylee can play, she’s not a boy.” Logan says, “Um, yeah. And only boys allowed.” I say, “And Rylee and me?” Logan says, “Yeah. You’re the only girls allowed.”

Logan did not use this criterion because he is sexist or does not want to play with girls. During this morning, there was a point when there were 10 children on the rug. There was a group of girls—Mia, Charlotte, Amelia, Scarlett, Sofia, and Hazel—who had some conflict with Logan earlier about a misunderstanding of who was using certain materials. Logan’s comment
about “only boys” was a strategy to maintain control of his structure as he was building and protect against more conflict and disruption from the perceived threat of “the girls.” Additionally, this is evidence that children sometimes use gender as a categorizing tool for their own purposes that have little to do with actual gender differences or gender roles.

Children did sometimes mention age as a criterion for joining, but they did not always mean actual age of the child. They gave the pandas ages based on the pandas’ sizes. They also changed their own age based on who they were in the play—“brothers” were often four or five, whereas parents, cousins, and grandparents took on various ages. Further evidence of children not talking about age in a real sense is that sometimes I would chime in and say, “What about 34-year-olds?” which was my age, and the children would seem very confused why I was bringing up my own age.

“That’s Not the Rule”

As I mentioned earlier, there are some general guidelines and specific rules that teachers had stated or supported in the block play area, along with standard classroom rules. Another strategy that children used to control and protect against someone wanting to join was to adapt, change, invent or misappropriate rules. When children did this, they would cite the rule when giving the reason why another child cannot join. In Visit 10, Liam arrived and wanted to join Lucas, Ethan, and Elijah building.

**Lucas:** Guys! We need Logan! (to Liam) We only want four friends, including Logan.
**Liam:** Well, Logan’s not…
**Mia:** Logan’s not here yet.
**Lucas:** No. You can play with us until Logan gets here.
**Mia:** No!
**Liam:** No. That isn’t a rule.
**Elijah:** Well, I’m here too!
The rule that Lucas was stating is a limit of four children that can build together. Having a specific limit on how many children can build together was never stated or reinforced by teachers. In some parts of the room, such as at table activities, there was a built-in limit of how many children could be there based on the chairs or activity set up. This rule could be referencing table limits, but as Liam said, “That isn’t a rule.” When children got called out about using a rule incorrectly, responses tended to either backpedal/amend the rule, or double down. This indicated that changing the rule or its use was intentional and not a product of misunderstanding the rule. When Liam challenged Lucas about it not being a rule, Lucas backtracked a little to say that Liam could join them in the limit of four people, but when Logan arrived, Liam had to build somewhere else so that Logan could be their fourth builder.

Another limiting strategy was to claim that the current builders, usually a pair, wanted “special time.” The four-person limit and special time are both ways of bypassing the classroom expectation of inclusivity. Earlier in this chapter I used the example from Visit 29 of Asher asking what Lucas and Ethan were building and Lucas responding that he and Ethan wanted to build with just each other. This example is the next part of that interaction, when Lucas and Ethan tried to reason with Asher about not joining with Teacher mediating

Lucas: I want Asher to leave me and Ethan alone.
Ethan: We want special time
Lucas: We want special time to build.

The way that Ethan and Lucas pleaded their case to the teacher indicated that they thought the teacher would understand and agree with their reasoning for wanting to stop Asher from joining. Prior to this visit, I had not heard children referring to “special time,” but it was reinforced that if a child wanted to build alone, it was within their rights to decline others from joining. Differently from the four-person limit, this was not a term that was used frequently in
the classroom, if even at all, by teachers. Although in that instance between Lucas, Ethan and Asher, the teacher supported Ethan and Lucas having special time, it was not a rule that gained enough acceptance in the peer culture to persist. Alas, the children found other rule bending or rule creation ways to deny entry.

**Blocked, Literally**

Children were able to use the physical structure and blocks to stop others from joining. They did this by moving blocks to barricade a pathway/street/track, create doors or blockades on the structure, or remove elements of their structure or another structure to cut off access.

(Important distinction: This is about stopping other children joining/entering, not in the context of fantasy play and trying to keep out “bad guys” or other characters). In Visit 72, Logan and Lucas were trying to block me from joining them by building a path.

Ethan begins talking about his castle. He is telling what every part is. No one was listening to him at first, but Lucas turns around and looks at what Ethan is doing. I ask if I should build a path. Ethan says yes. Ethan uses the word “precipice.” Logan sees the path and pulls one block away, telling me no to the path. I tell Logan that I’m using it from my part to Ethan’s. Lucas reminds me that there’s no one allowed. I tell him that it’s from my part of the structure. Lucas resolves that only Ethan can come in. Logan builds a doorway and wall for the pathway.

Although Ethan had said yes to me joining, Lucas and Logan overruled him by building the doorway. The blockade being used did not have to be an actual block—invisible doors/walls worked in the same way. In Visit 44, in the middle of an argument about whether Mason could join in driving his train on the tracks that had been built, Lucas gave a reason, in complete earnestness, that there was an invisible door blocking the entrance to the track.

**Me:** Why are you trying to stop him from using them? Why can’t he also use the tracks?

**Lucas:** Because. There’s an invisible door.
Looking back on this moment, I find it rather humorous, especially because of how serious Lucas was when he said it. However, at the time, no one was laughing, and Mason and I had to figure out how to open the invisible door to allow Mason on the track. The invisible blockade on the track was just as real of a barrier as if it had been wooden blocks. It was impressive that the children developed this creative way to use blocks both in collaboration and as a way to restrict access. Even when the blockade was invisible, the children were playing off of the physical nature of blocks. It is not a huge cognitive leap to imagine an invisible wall when real walls are also built.

Building block walls and blockades is yet another example of how pretend play in the block area is unique to pretend play in other areas of the classroom. Children can create real boundaries to stop other children from joining. Children can also set and move where the boundaries are located. In spaces such as an outside playground, children may be able to designate an area, like the sandbox or climbing tower, as a place where other children cannot enter. But those areas are pre-set and not moveable. With blocks, children can expand, relocate, remove, or rebuild depending on social interactions.

**Conclusion**

Joining and being joined are complex parts of the peer culture in the block play area. The strategies are initially guided by rules or observing the way adults do things, but then repeated, repurposed, and appropriated as cultural routines of joining. Sometimes joining is as simple as directly asking, “Can I join?” but often joining involves more intricate interactions. Children used strategies to join from direct verbal requests to indirect coded questions, to non-verbal. Some types of strategies seemed to have a higher success rate of accomplishing the goal of joining; non-verbal strategies tended to result in a non-response or a defensive/protective
response. Corsaro (2003) found that children’s access strategies, or attempts to join, often utilized a series of strategies that built on one another. While I found some examples of children stacking strategies when their joining attempts were being rebuffed, it was more common for children to only need one strategy, or sometimes repeating the same strategy multiple times.

Interactions between children are important to explore, but interactions also happen between children and blocks/structures. Block structures are visual representations of children’s thoughts and pretend play. As I searched for patterns of joining or being joined, I found the structure to be, literally and figuratively, at the center of interactions. The structure is the central focus, rather than a particular child who is leading imaginative play. This rings true for adults as well; it is much easier to ask to join into an activity, such as a pick-up sports game, than it is to join a group of people having a conversation. To join into a conversation or imaginative play, more preparation is required to know when and how it would be socially acceptable to enter.

The other side of joining is being joined. Children had creative strategies for moderating and gatekeeping access to their structure. For the most part, the strategies were used to keep other children from joining. However, some of the conditional access strategies demonstrated an openness for other children to join, provided that they follow the conditions. Children found creative ways to remain within the rules and values of the classroom, while still exerting control over their structure and play. Children also adjusted or created rules as a means to continue building with certain children and not others.

In the next section I will share how children navigated building together after joining. Similar to joining strategies, the children developed and amended the cultural routines of their collaborative work to accomplish their goals, but still play together. I will demonstrate how children reconceptualized what it meant to build together.
CHAPTER FIVE
BUILDING TOGETHER

The block play area is, by definition, a socially interactive space. Due to the uniqueness of how blocks and materials are shared, along with a lack of formal boundaries of space, children have to build together, even if they are building alone. Much of the block play literature includes the value of block play for social interactions and development (e.g., Kinsman & Berk, 1979; Danby & Baker, 1998; Cohen, 2015). Beyond the necessity of social interaction in the block play area, children want to build together. In my classroom, children were excited to share their ideas and create. But preschool aged children also have a strong desire to carry out their own building plans. Corsaro (1992) explained that, while children want to be social, they also want to protect their interactive space so that they can keep playing, or building, without disruption. This is intensified because the interactive space in this circumstance is not just a psychological space—it is also tangible and visual.

Throughout the school year children had to navigate how to build with the peers they wanted to build with, while still building something they wanted to build. As children negotiated structural design, including material and block usage, they developed new ways of doing things that evolved and helped them to achieve their goals. Cohen (2006) explored the role of language, and language development, in the block play area. This was not just about developing vocabulary; language development is a key component of meaning appropriation and symbolic representation. In other words, children are gaining skills at verbally communicating in a social way, and labeling and describing what they are building.
Two common questions asked by teachers and children during block play were: (a) “Who’s blocks are those?” and (b) “Who built that structure.” Wooden unit blocks are plain, uniform, and unlabeled. Each day, blocks begin as communal materials again. Children need to determine on a daily basis who blocks and structures belong to. Throughout the year, children developed a variety of ways to determine and claim ownership of materials and structures, while still being able to build together. I will be discussing the strategies, patterns, rules and understandings in which control and ownership were defined and evolved. It is important to note that, while new strategies and meanings progressed, earlier ways of building together were still utilized.

Additionally, it is necessary to note that children had different levels of involvement in the cultural processes of building together. The distinction I am going to make are “regulars” and “occasional visitors.” The regular builders were on the block play rug for at least some amount of time almost every day. Regular builders also often spent the majority or entirety of the morning free play time in the block play area. Occasional visitors were more sporadic in their frequency and time spent on the rug. Danby and Baker’s (1998) study followed a group of boys who were regularly in the block play area, making a similar distinction, with a slightly different focus. There was some shifting of who was a regular or occasional visitor from the beginning of the year to the end of the year. These labels are not meant to be a strict binary. The core group of regulars remained consistent. The distinction between regulars and occasional visitors in the block play area played a role in the evolution of how children built together.

“What Should We Build Together?”

When the school year started, children generally built in pairs or small groups. Children could choose to build alone, but it was uncommon. When a child chose to build alone, it was
often a short duration and/or involved a child arriving towards the end of building time. Research supports block play as a curricular opportunity for children to navigate sharing resources and space, negotiate, and work collaboratively (Wellhousen & Kieff, 2001). As children gathered to build, the first important decision was about what was going to be built. Through the negotiations of what the structure would be, one child often emerged as a leader/organizer, typically by giving orders to other children with an elevated voice volume. This child would direct other children to get certain supplies, determine how the structure should look, and what parts of the structure each person might build. Having someone take charge did not eliminate disputes; conflict was frequent. Corsaro and Eder (1990) explained that these types of conflict reinforce elements of the peer culture in regard to effective strategies for acquiring or retaining play materials, social power and positions, and their own (non-adult initiated) social rules. The benefit of a leader, even when children were not in agreement about what the leader was saying, was that they could start building together quickly with some cohesiveness. In this example from Visit 5, Lucas took the lead. He did some compromising when it came to what we were building and directed Asher and I on where blocks should go (or not go.)

Lucas and Asher walk into the block area. Lucas immediately picks up a big block and brings it to the wall side of the carpet. Lucas puts his block down and tells Asher to go get a big block, too. Lucas also gets another big block. Lucas and Asher place the blocks together in a cluster and Lucas announces that they are making a boat. Asher says that it’s a house. Lucas replies that it’s a house on a boat. Asher agrees with this statement by nodding his head and says, “Yeah, good.” As I add more things to the structure, I am trying to check in with Lucas to see if he approves what I am doing. Asher is building on the side of the structure that is very close to the side wall shelves. Lucas sees what Asher is adding and says, “No! No! Don’t move that! No!” Asher says that he wants to build it differently, but Lucas tells him that he is in charge, so he gets to decide if things get moved.

I checked in with Lucas to make sure that I was building according to his vision. Although I was the one building, I was recognizing that the part I was building was not mine—it
was part of the group structure. During Visit 9, I had been building the structure’s dungeon, with Lucas as the person in charge. When Elijah joined us on the rug, he asked me if he could build with me, and I told him he was welcome to add on to my structure. Lucas had built an ice slide in the dungeon, but otherwise, I had constructed the entire structure. Elijah was playing around pretending to be destroying parts of the dungeon, without actually breaking anything. However, the way he was playing definitely could have resulted in accidental knocking over. Lucas was not happy that Elijah was behaving this way and asked him to stop. Elijah was not happy because he wanted to keep doing what he was doing—and I had told him that was okay. In my mind, that was my part of the structure to be able to give permission for someone else to play with.

However, that was not the shared understanding of the children. I wrote in my field notes:

This whole battle over the dungeon structure, which I had built entirely by myself, was interesting to me in terms of ownership. It was not Lucas’s structure—he only added the inside ice slide. Elijah was not being aggressively destructive, he was being silly and I was playing along. When the teacher came up and told Elijah that Lucas doesn’t want him to break his structure, I wanted to interject that technically, it was my structure and I was fine with what was happening.

But my personal ownership of the part of the structure was not recognized because, at this time, structures were communal. Teachers were also not distinguishing different parts of the structure as belonging to an individual child, so their support efforts also reinforced this understanding. I do not think that teachers were viewing the structure as belonging to just the person who was in charge; they were coming from a place that it was all of our structure, so if one person did not want any part of it broken, that had to be respected. Elijah did not protest to what the teacher was saying—he accepted that he had to listen to Lucas’s concerns and stop what he was doing.
These are intricate distinctions of ownership that mix both collective and individual aspects. Block play is promoted as an activity that builds collective social skills and working in a group (e.g., Provenzo & Brett, 1983). However, the way children have a shared meaning about the structure being everyone’s, yet also being in charge of building a specific part, demonstrates that children are finding ways to have control of their play within the context of building together. I could build the dungeon structure how I wanted to build it, but with the understanding that it is a part of the whole rather than its own entity.

Even though one child might have been most in charge at the start, there was still discussion about what parts of the structure we would each build, and where we should build it. From early on, the way we built together was to split responsibility for different sections of a structure, rather than all adding on wherever there was room to add on. In this sense, the building was organized with a fairly clear group vision of what was going to be built. This does not mean that building together lacked conflict or disagreements—even with an agreed upon plan, children had agency and potentially different understandings of the plan. In Visit 4, Ethan talked with me about what part of the structure I was going to build, and Lucas added information about other features of the structure that also had to be built.

Ethan takes out the little wooden people. Ethan and Lucas talk about the people and begin discussing what else they need to build. I get a panel and put it down on the floor next to the main structure. Ethan comes over to me to tell me what I should build. Ethan tells me that I need to build a kitchen. I laugh, as this is what Ethan always tells me to build, and tell Ethan that the current part of the structure I am working on is going to be a bedroom. I tell him I will build a kitchen after the bedroom. Lucas says that there needs to be a drawbridge to keep water from getting inside. Ethan adds that it is also for keeping enemies out. Lucas, Ethan, and I quietly build our own parts of the castle.

Ethan telling me to build the kitchen was an ongoing bit during the school year. However, it did reinforce that we each had our own jobs and our own specialties. It is a common
value in American preschools, and certainly in my classroom, that as a part of the classroom community, everybody does their part to care for the classroom, materials, and each other, especially during clean up time. Having specific jobs, or the divide-and-conquer strategy, is familiar to children. However, children do not usually have the power to decide what other children do or their own part; it is usually at the teachers’ discretion.

Additionally, in terms of typical classroom culture, just because a child was in charge of cleaning up or working on a specific area, it did not make it their area or materials. There was still an understanding that they were doing something for the collective classroom community. During that part of the school year, even if I was in charge of the kitchen or a bedroom, there was still an understanding that everyone building together could add on to anyone else’s part of the structure. There were still arguments and conflict about adding on, but the source of the conflict was more about the addition being disruptive to the vision, rather than an objection over the ownership or control.

“That’s My Part, I Builded It”

At the beginning of the year, when blocks were added to a structure, they now belonged to the structure, instead of an individual child. Children experienced objections if they decided to remove a block that was “their block” because doing so changed the structure and could result in the structure falling. The structural design and integrity were dependent on those blocks. It was evident that there was a shared understanding that keeping the structure standing was the most important goal. When blocks were taken out to build a certain part of the structure, they were not perceived as belonging to the person who took them out. During Visi 9, Lucas asked me to build the kitchen in a particular location, but I could not fit my body to build where he wanted me to put it. I started building a kitchen structure where I did have room, but Lucas saw that I was
building it in the wrong location. He picked up the blocks I got for the kitchen and moved them, despite my protestations of them being taken down and moved. Ultimately, I had to accept that the blocks I had taken out and was building with were for the kitchen, and therefore were not “my” blocks, they were the kitchen’s blocks.

Lucas tells me that the kitchen will be over by him on the rectangular big blocks, but I do not have space to go sit over there, so I tell him that I am going to build the kitchen right where I’m sitting. Lucas turns around and we discuss whether or not I should move the kitchen where he wants it to be. I tell him I cannot sit over there.

**Me:** What can I build right here?

**Lucas:** Noooo. Lucas picks up one of my long unit blocks and moves it to where he is building. I grab yet another long unit block from the shelf. Lucas comes back towards me and starts moving all of the unit blocks I have on the ground.

**Me:** You’re going to take it all apart?

**Lucas:** Yeah because we need this.

Separate blocks on the carpet in front of a child building were “their” blocks, but the ownership shifted when blocks became part of the structure. In this case, I had agreed to build the kitchen before taking any blocks out, so the blocks I took out were assumed to be for the kitchen. When this type of situation happened to other children, there were objections and displays of restrained frustration. It was frustrating to feel that you had to give up blocks or your own personal plan, but there did not seem to be a different way. This frustration laid the groundwork for a change in this shared understanding as the year progressed. Corsaro (1992) explained that conflict, even as restrained as the conflict between Lucas and me was, is a catalyst for development and change. These conflicts were pushing us as a group towards finding a way of doing things that worked better for us.

Group ownership began to shift into individual ownership of the parts/whole structure that each person built. The frustrations about the limitations of communal ownership developed into children finding solutions to have more control. Due to the burgeoning shift into more
individual ownership and control, there were new sources of disagreement and negotiation. One type of situation was when a child did not want something to be changed or added to what they were building. In Visit 36, Ethan and Lucas were building a structure together and Asher joined them on the rug. Asher wanted to add something onto the part of the structure that Ethan was working on. Through their negotiation, they were able to establish that: (a) Ethan was allowed to tell Asher to stop, and (b) if Asher did not like how Ethan was building, Asher could build his own structure.

Asher tries adding on to the structure but is told no by Lucas and Ethan at different points. Ethan puts L unit blocks across the top again. Asher slides one over as Ethan gets another block. Ethan grabs the block Asher is moving and looks directly at him.

**Ethan:** Stop!
**Asher:** But, Ethan, now this looks like a jail.
**Lucas:** Asher, that’s how Ethan builds.
**Asher:** But at my house the door goes like this so we need to build it like my house.
**Ethan:** Well, I builded it, so
**Lucas:** Asher, you can make yours, a different one.
**Asher:** Okay, I will build the play room.
**Lucas:** And our bedroom.
**Asher:** Yeah, I can build those.

In this above example, Asher fairly quickly accepted that he could not add what he wanted to Ethan’s part of the structure. When Ethan said, “Well, I builded it, so” as justification for Asher to stop, he very specifically used “I” instead of “we.” Earlier in the year, Asher might have argued that the structure Ethan was building was “all of our” structure and teachers might have supported Asher in being able to add what he wanted to the structure. But now, Ethan was asserting individual control over his structure. This demonstrated Corsaro’s (2020) assertion that children actively contribute to their own cultural production and change. Teachers were not the ones making a change, the children were.
Building a large structure together as a pair or small group was still happening, but there was a shift in how ownership was defined for the inside parts or sections of the structure. The structure was not just an all-inclusive entity; each child was in charge of any additions they made to the structure. Other builders had to check in with the child who built something before adding, removing, or changing anything.

Due to this shift, there were new types of conflict and situations to navigate, such as negotiating if it was okay for someone to take down the outside of a structure they built, if the inside of the structure, built by someone else, would be impacted. Through these negotiations, children are reaffirming and adjusting the shared understanding of ownership. Aligned with Corsaro and Molinari (2000), the meaning children are making out of identifying the boundaries of individual control produces their own cultural system, which will in turn impact children’s individual development of skills, such as cognition and language. In Visit 34, Ethan, Logan, and Lucas experienced this situation with a house structure.

Ethan is behind Logan using a teasing type voice. Logan says something and Ethan says, “That was my house!” Logan says, “I made it.” Ethan says, “I made the inside—this.” Lucas says, “You made the church, right Ethan?”

Although there was an emerging shared understanding of individual ownership, this could be upsetting to children building in a group when a part of the larger structure was being destroyed, especially if it was connected to their part. The value of structure stability that was previously held in the highest regard was giving way to valuing individual control. Earlier, I gave an example from a time that I had allowed Elijah to play in a (playfully) destructive way with my part of the structure and Lucas objected. Elijah accepted what Lucas had said and stopped playing with my part of the structure that way. However, as the tide was shifting, children were less willing to oblige such a request when it was their construction.
Children were gaining more individual agency and power within collaboratively building together. Having opportunities for agency is one of the benefits researchers have identified in block play, and even more specifically, wooden unit blocks (e.g., Danby & Baker, 1998). Children tested the limits of this new conceptualization of structure ownership, which is the way that cultural routines are established and reinforced. As children were figuring out how to protect their structures, some children wanted to destroy their structures. In Visit 20, Mia had built a part of a larger structure with a group, including Charlotte. Mia wanted to knock her part of the structure down, but Charlotte did not want Mia to do this.

Mia starts kicking over and toppling over the big blocks. One she is trying to push over is right in front of me and I ask her to stop and inquire about what she is doing. Mia takes more parts of the structure apart and Charlotte tells her to stop breaking it. Mia tells Charlotte, “I made this. I made all of this.”

To clarify, when Mia said, “I made all of this” she is talking about her large portion of the structure, not the entire structure that Charlotte and a few other children built. Charlotte was definitely not thrilled with Mia’s actions but did not tell Mia to stop again. Shortly after this, a teacher did tell Mia to stop because her destruction was impacting other children’s structures as the bigger blocks crashed onto the carpet. Mia was utilizing this understanding of ownership to knock down her portion of the structure because she was angry that the other children building together were not following her instructions while building their own parts. When the teacher stepped in, she did not tell Mia she had to stop solely because knocking down her own structure was not okay; Mia had to stop because her actions were impacting other structures.

“Let’s Connect!”

Children wanted even more control over their own constructions. However, children also wanted to continue to build together. This is at the crux of Corsaro’s theory of preschool aged
children’s social patterns (1985, 1990, 2003). Again, frustration and conflict were a driving force behind changes in the cultural routines of the block play area. Up to that point in the year, children had resolved the frustration of not having enough control in a collective structure by designating sections of structures, and then inside parts of structures, as belonging to individuals. As was mentioned, the new frustration that this caused was that if someone else had ownership of a section or part, it could have an impact on the whole structure or other sections. Children wanted to have full control over the entirety of their structure, while still collaborating and playing socially.

Children figured out that structures could be built individually/separately, where they had more control over the structure, and then connected together by bridges, passageways, or other types of paths. When children began using connections to separately build together, it was a shift into a new way of collaboratively building together. This also coincided with children’s motor skills and cognitive development growth. Using the lens of interpretive reproduction, children were also contributing to their own development and change (Corsaro, 2020). While the regulars in the block play area had gone through this change in cultural routines of ownership, occasional visitors had not been through the same experiences. The use of connections became increasingly common for regulars but was quite a departure from communal buildings for occasional visitors. In Visit 34, Lucas had been building with Asher, who at that point in the year was only an occasional visitor, but they were not in agreement about what they were building.

Lucas: (to Asher) That could be our grandpa house.
Asher: No, it’s our house.
Lucas: No, I don’t want…

Lucas then told Asher that their house needed to be bigger and was able to talk Asher into getting another panel and building an additional separate structure.
Lucas calls out to Asher, “Are you our grandma and grandpa?” Then Lucas asks, “You live across the ocean, right?”

Through utilizing the connection strategy, Lucas and Asher were able to continue building together. When Lucas asked Asher if Asher’s Grandma and Grandpa house is across the ocean, he was confirming with Asher that it would be separate from his (Lucas’s), yet still part of the same imaginative narrative. It might seem that I am demonstrating a way that Lucas was being manipulative, but that is not the case. Lucas was not trying to manipulate Asher. Lucas just wanted to be able to keep building what he was building, but also build together with Asher. Lucas was, in a way, orienting Asher to this new way of building together. Asher did not express any behavior indicating that he perceived Lucas to be pushing him away, such as objecting to the separateness of the structures, because there was a shared meaning that the cross-ocean bridge (connection) was still building together.

Children were choosing (or being encouraged to) build a separate structure, with the intention or agreement that they would connect the structures. Building alone and then connecting was the way to have full control over the structure they were building, yet not eschew their desire to build in a collective way. Some children were motivated to do this when they had a specific style of structure they wanted to make. For example, Liam had a specific way he liked to make structures with two XL unit blocks standing vertically on a wooden panel and a third XL block across the top. He allowed other children to build with him if they asked but wanted to be able to create this structure in his specific way. However, Liam really enjoyed playing socially, so structure connecting was a great way for Liam to have the best of both worlds.

As the idea of connecting structures developed, children were able to have even more control over the structure they were building. It also allowed me to have more agency, without
children taking my blocks or taking over my structure. When children play with adults, adults typically allow children to lead the play and adults follow whatever the child wants. Block play literature directed at teachers as best practices encourages adults to play only a verbally supportive role (Provenzo & Brett, 1983; Newburger & Vaughn, 2006). Teachers are not supposed to go in and build their own structures. Building my own structure clashed with children’s expectations of adult behavior in the block play area. Due to this, before the shift to utilizing connections to individual structures, it was ethically challenging for me to decline to build with a child or assert power to build what I wanted to build. When I would not let children take my blocks or rearrange my already-started structure, it was frustrating and confusing for them. Despite the children mostly accepting me as an atypical adult who builds with them but is not a teacher, I could not fully shed my adultness in order to have agency and power, without being worried I was confusing children. When I could utilize the shared understanding that I was in charge of my structure, and could say yes to building together, separately, without sacrificing my own building plan, I was able to behave more similarly to the children. In Visit 44, I negotiated with Lucas about what he could or could not add to my structure.

Lucas sits down in front of my structure. He is moving the blocks on top of my structure, that were spread out, together in the middle.

**Me:** Wait, oh, but I wanted them to be like that. [Moves blocks back to original positions]

Lucas tells me that it has to be filled in (the cracks between blocks) and goes to the shelf to get small skinny blocks to put in between.

**Me:** Are you building on mine or are you building a castle with Ethan?

**Lucas:** I can build on yours if I want to.

**Me:** That’s fine, but I do have a specific vision for this structure.

Lucas tells me that he needs to add certain blocks across the top of the structure to protect it from snow and rain. I tell him that he can build with me, but that I have a specific way that I want to build the roof.
Although annoyed, Lucas accepted what I was saying and let me build how I wanted to build. The increase of building separate structures also meant that a child could protect their structure from other children who they did not want to build with. There were children who had gained a reputation for knocking over structures, whether intentional or just clumsy. In their classroom, the teachers regularly reminded the children of their classroom culture of community and inclusion. Separate structures that were then connected was an acceptable way for a child to protect their structure and have control, but not directly exclude another child.

The way certain materials were used also shifted with the emergence of the new cultural routine of connecting structures. Wooden panels/boards were being used as both a way to define an area for an individual structure, and a base location that others could connect their paths to. With the wooden panels, it was a clearly defined area that could be claimed as “my space.” The wooden blocks and panels provided a physical and visual tool for reinforcing the value of separate but connected. Wooden panels also confined structures to a certain width, which allowed for more individual structures in the limited rug space. However, children sometimes added together multiple wooden panels, which would claim rug territory quickly. If children decided to collaboratively build in a classic sense, the wooden panels provided a clear distinction for ownership of parts of a structure. Children would ask to add their panel to a structure already in process or would claim certain panels as theirs that they had set down on the rug. Anything then built on top of that panel was designated as being that person’s property. In Visit 58, Logan arrived on the rug and got some materials to use to build with Lucas.

Logan gets some bricks and puts them down on Lucas’s panel. Ethan is over by Logan doing some type of flying or shooting sound while moving a frame block in the air. Logan seems to be interacting. Lucas comes back from the shelf and starts asking Logan if they are going to be doing a pizza party, but then a part of Lucas’s structure falls and they both get distracted. Lucas asks Logan to build on his own panel.
Logan attached his panel to Lucas’s, but the panels were understood to be separate. “Pizza Party” was a game Lucas, Logan, and I had played across a few visits. When I was invited to join to make the pizza house, I got a panel and placed it down, then attached it to Lucas and Logan’s panels. Elijah had been building on his own panel and wanted to build together with me.

Elijah says, “Missi, can I connect my structure to yours?” I tell Elijah it will be very hard, based on the positioning of his little structure, to connect to mine without being in the way of what we’re doing. I suggest he could ask to connect to Lucas’s panel. I show Elijah which parts are mine, Lucas’s, and Logan’s. I ask if Elijah wants to connect to Lucas’s and he says, “Okay.”

I had to distinguish which panel belonged to each of us because they were all attached together. Once I showed Elijah, he had a clear understanding of the boundaries of each of our structures. Earlier in the year, it would have been much more difficult to come to a shared understanding of ownership because there was not a shared understanding of the visual clues that identified where one person’s part started and ended. Elijah had a shared understanding about how wooden panels were being used to define individual structure boundaries. As will be discussed further, occasional visitors often did not have the same understanding of the meaning of panel boundaries. It was not intuitive to think that panels that were touching/next to each other would actually be separately controlled. The children who were regulars were able to establish and reinforce this understanding, but the occasional visitors missed out on those experiences and negotiations.

Wooden panels and connecting structures also allowed for more elaborate structure complexes, rather than just one big structure. Panels were used to define islands or floating docks for boats. Even structures that were considered one structure were built in a modular way, with separate sections having space between them that needed a ramp, bridge, or pathway of some
type to connect them. Wooden panels were still being used as a floor/roof for a second level of a structure as they had earlier in the year, but since there were only nine panels, they would run out quickly when children grabbed a bunch when they arrived at the rug to mark their territory. By the time children established their space on the carpet, there might not have been panels left to use as a roof or second story floor.

Corsaro (2018) says that block structures can be viewed as an artifact of the children’s culture. This is a special benefit of studying peer culture in the block play area. What I find interesting is that there is visual evidence that structures were being built differently. But, without the context of the meaning behind using wooden panels differently, it might just appear that the children had figured out that their structures balanced better on the wooden panels rather than the carpet. Visually, images of the group structures at the beginning of the year looked similar to structures built with individual ownership of panels pushed together (per the example with Lucas, Logan, Elijah, and myself). If a teacher was observing as an outsider, it might not seem that much had changed, which was also the experience for the occasional visitors. Yet, from the children’s perspectives, especially the regulars, the early group structures and later modular structures were completely different.

Building separated structures also influenced children’s creative decisions. The separate structures sparked ideas such as building train tracks, roads, and boat canals. Aside from pushing XL unit blocks on the carpet like boats, which did not have any defined path, all of the play activities happened in or on the structure. (With the exception of flying airplanes around, but that did not require any structural elements beyond the blocks used for airplanes.) Children were able to move around the carpet from structure to structure. Structures were able to be considered as part of a city/neighborhood, which also meant greater structure diversity, beyond just a castle or
a house. In Visit 45, children built an elaborate design of train tracks connecting different structures, including houses, islands, train stations, and a drive-thru kitchen. Connecting more than 2 structures in one complex also became an increasingly more common occurrence. In Visit 68, Lucas, Ethan, Amelia, and I connected our separate structures.

I build “tracks” out of carpet squares. I connect my station to Lucas’s structure in 2 places, making a loop. Ethan has been working on building something—I think tracks—with the XL unit blocks. I ask Amelia if they want me to add a track to connect their structure. Amelia tells me yes. I’m out of carpet squares, so I use mini bricks as the outside edges of a track.

Pathways and connections between structures got longer. Children started discussing the track building as a job for someone, which was an indication of another shift in how children were thinking about connections and separate structures. Previously, the connections were an afterthought. Now, the connections were being considered alongside the initial structure conceptualizations. The XL unit blocks, similar to the wooden panels, had become more essential to building because they were the easiest/quickest material to use as a pathway/road/track. There was a larger quantity of XL unit blocks, compared to wooden panels, but there was still audible frustration when a child arrived at the rug and realized all of the XL unit blocks were being used.

Connections and pathways created a new circumstance to navigate—deciding who was in charge of the pathways. There were disagreements about a variety of components. Even at the end of the year, children were still negotiating ownership and working to develop a shared understanding, as it related to connections. It would have been interesting to see what the next evolution of children’s cultural routines for building together might be if there was another month or two of school.
Children had to have conflicts and negotiations to develop new understandings and rules. As the conflicts and negotiations were happening, children tried applying previous rules, or re-appropriating/adjusting classroom rules, to try to regain control over their structures and play. This was even a source of conflict between myself and certain children when I felt a child was trying to impose a new rule that did not make sense. For example, in Visit 44 a group of children had created an elaborate railway system which connected individual children’s structures. Lucas had been vocally directing people, but children were also building their own structure as they wanted. It was typical that children would build the connections/pathways stemming from their own structure. The tracks were mostly built, and children were starting to play on the tracks and in the structures.

Mason is moving his frame block across the track that Ethan built.

**Lucas:** Hey! You can’t take that track! (pushes Mason’s train off the track) Don’t take this way. Only two cars can go on this route.

Mason gets a second frame block and turns towards Lucas, heading back to the part of the track he was using before. Lucas stops Mason and pushes him back.

**Lucas:** No! You have to make your own train bridge!

**Me:** Why?

**Lucas:** Because this train bridge leads to me and Ethan’s hide out.

**Me:** Right, but Mason’s been building with us. Like, we’re using some of his trains, he’s using some of ours.

**Lucas:** No. These are our trains.

**Me:** But he can use the tracks. Why not?

**Lucas:** You need to make your own tracks.

**Me:** Well he can’t because we don’t have enough blocks left.

**Lucas:** No, we do have some more blocks. Little ones.

**Me:** I think you should let Mason use the tracks as long as nothing’s getting broken.

Lucas goes to the shelf to get more blocks to stop Mason’s train from going on their tracks. Mason stands in the corner of the rug holding his frame block train.

**Me:** Why are you trying to stop him from using them? Why can’t he also use the tracks?

**Lucas:** Because. There’s an invisible door.

**Me:** I understand what you’re saying, but Mason has been building with us. He should be allowed to use the tracks, too.

**Lucas:** But me and Ethan built these tracks so we use them.
Me: Okay, but I built a lot of this stuff (pointing to my structure) and I’m letting you guys use that. Right?
Lucas: Yeah, but…
Me: Because that’s how we build together.
Ethan moves his train onto the tracks and ramp that Mason had built.
Mason: I know, but look… (points down to Ethan’s train)
Me: And that’s Mason’s track, so if you want to use that part, Mason should be able to use this part (gesturing to the rest of the track.)
Lucas: Fine. Mason, you can use this.

While I was the one arguing with Lucas, I was advocating for Mason based on what I thought he was thinking and feeling. (My verbal and social skills made me better equipped to go toe to toe negotiating with Lucas.) The challenge was that the tracks were the same width as the trains, so trains traveling in opposite directions were not able to pass each other. In this circumstance, Lucas’s objection to Mason’s train on the tracks had nothing to do with Mason’s building (or knocking down) skills or the strength of their friendship—Lucas just wanted to be able to keep driving his train on the tracks, to keep playing what he was playing.

“That’s How It Works Here”

Building together by way of building separate structures and then connecting became a normal occurrence, especially for children who were block play regulars. The more normal it became, the less negotiation and discussion was needed, which made building together more efficient. As I discussed previously, this is when XL unit blocks started to become more essential to building. There was not a negotiation about what materials would be used for tracks; the XL unit blocks were the top choice if they were available. It was typical for a child to go directly to get a wooden panel when they arrived on the rug. For example, in Visit 63, Liam and Lucas arrived first to the rug in the morning. Before there was a discussion about building together, Liam and Lucas had both already taken out a panel. Liam asked me if I wanted to also build a
castle, which was not an invitation to join him, but was Liam asking what I was building individually.

Liam gets out a panel and an arm full of L skinny unit blocks. He gets down two XL blocks and places one on either side of his panel. Lucas arrives at the rug. Lucas gets out two panels and slowly walks to the west side of the carpet. Liam says, “Missi do you want to build a castle, too?” I tell him sure, and suggest that we each three build our own structure and connect them. Liam says yes. I get a panel.

If Liam had been inviting me to build together on the same structure, he would have phrased it “do you want to build a castle with me” as opposed to using “too.” However, he was still inviting me to build together with him because he checked if I would be building the same type of structure as he was. I was the one that suggested separate structures, but I only did that because I understood what Liam meant by his question about what I was building.

This example demonstrated how subtle the shift was in terms of language or outer appearance, but that it was a big shift in terms of having a shared understanding of what was going on. It became clear that occasional visitors did not understand the shift. There was a change in the morning schedule that allowed for an insight into the lack of shared meaning between regulars and occasional visitors, as it pertained to building together via building separately with connections. When the weather got warm enough for children to play outside for extended amounts of time, teachers made a change to the morning schedule and only some children would stay inside the classroom for free play, while the rest would go outside. The decision about who stayed in and who went out was based on a variety of factors, sometimes just who arrived at what times or which children needed to complete a particular project. The regulars, Lucas, Logan, Elijah, Liam, Asher, Ethan, and me, still spent the most time in the block play area compared to other children. It was unlikely that all of the regulars were there at the same time, but there were typically at least two. (Jackson and Mateo became regulars towards
the end of the year, but always played together and built the same type of structure every time, so they were mostly in their own bubble.) For the occasional visitors, the style of building separately, connecting, and having ownership over parts of structures, was confusing. Deciphering the meaning of questions and interactions was more challenging.

Occasional visitors were confused because they did not have the shared understanding of the regulars about what “building together” on the rug could mean. Some of the children that were chosen to stay in the classroom during morning free play had not been to the block rug since earlier in the year. The concept that building alone could also mean building together did not seem to compute and caused frustration for the occasional visitors. Especially with wooden panels, it was evident that there were customs, rules, and meaning that occasional visitors were not privy to. In Visit 60, Elijah and I each had our own panel we were building on, but the panels were attached. To Rylee, it looked like Elijah, and I were building one structure collaboratively, but Elijah and I were actually building our own structures.

Elijah tells me something about adding ramps, and I tell him he can figure out the ramps, I’ll build the pizza house on the end panel. Rylee arrives at the rug. Rylee says, “I will help!” I tell Rylee that we are all building our own things and then connecting them. Rylee points to my structure and I tell her I do not need a helper and she can build her own thing. Rylee remains sitting next to me. I re-affirm to Rylee that I don’t want help building my structure. She says, “Elijah is helping.” I tell her that Elijah is building his own separate structure, too. Rylee continues sitting next to me.

Elijah and I were building together, but not in the way that Rylee was understanding. It was reasonable for Rylee to think that Elijah was helping me build because our panels were touching, and we were talking about the structures. As much as it was frustrating for occasional visitors to navigate situations where they felt excluded, it was also frustrating for the regulars to have to explain a way of doing things that felt second nature. Sometimes it felt like an occasional visitor was being defiant or purposefully not listening to the requests of another child (or me)
building, but they actually might not have understood that they were crossing any lines. In Visit 61, Amelia got to the rug and wanted to build with me and the other children on the rug. I told her she could build with me, but that she cannot add on to my structure.

Amelia arrives at the rug and asks if she can build with us. I tell her, “Of course you can.” Amelia grabs rectangle frame blocks and tells me she’s going to add some windows. I tell her that I am building my own structure. Amelia says we’re all building together.

My reaction when Amelia said that was to be annoyed that Amelia was not listening to me—I had told her in clear words that I did not want her adding on to my structure. But I also told her that she could build with us when she asked. She did not have the same understanding of what “build with us” meant. Peer culture of young children has previously been studied as one culture for all of the children in a classroom. In other words, that all of the children have a shared understanding of cultural routines, rules, and cultural processes. Focusing specifically on the block play area, where some children participate every day while others are much less frequently there, highlighted that children’s peer culture could have sub-cultures and cultures tied to a specific context or classroom location.

**Conclusion**

Block play remained a social and collaborative activity throughout the year, but what it meant to build together evolved. There was a dynamic connection between the blocks, culture shifts, creativity, and development that cannot be teased apart. Children used certain types of blocks, such as wooden panels or XL unit blocks, differently at the end of the year than they had been used toward the beginning. Children’s desire for being social but also having control over what they were building was foundational for why children were motivated to find new ways of doing things and new cultural routines.
Block play literature has been demonstrating the value of negotiation and collaboration for children since its earliest days. However, the discussions of this value are typically about children building individual skills for language, reasoning, and social/emotional. I found in this study that negotiation and collaboration actually fundamentally changed the way children built and functioned in the block play area. As children figured out new ways to have control over their building, the way they interacted and the types of conflicts that occurred shifted.
CHAPTER SIX

FRIENDSHIP

The block play area is a space in the classroom that necessitates interaction by the nature of the lack of physical boundaries and self-serve blocks and materials. Social interactions are highly concentrated due to the dueling motivations to play socially but also have control over their structure and play. The benefits of block play for children’s social development are a main component of what researchers have identified as valuable (Provenzo & Brett, 1983; Wellhousen & Kieff, 2001). Literature has described that navigating resource and space sharing, negotiation, and collaborative building require and develop children’s social skills (Aksoy & Aksoy, 2017). Even if children choose to build by themselves, they still have to interact with other children when getting blocks or materials and identifying available space. Teachers are encouraged to even further foster the social nature of block play by supporting and modeling positive interactions and communication (Kinsman & Berk, 1979).

Children’s social interactions develop meaningful connections and friendships. Corsaro (1994) offers that defining friendship is dependent on the shared meaning within the context and culture and contains the basic components of verbal acknowledgement between the children, quantity of time spent together, and continuity of the relationship over a “minimal period of three consecutive days.” I am defining friendship along similar terms. To be defined as friendship, there has to be a shared understanding of the meaning of materials and representations of structures. Unit blocks are plain, and the other materials are open-ended, so what the blocks and structures mean has to be shared. For some types of friendships, continuity is an important
indicator. Continuity can be in the play scenario about the structure, or the frequency and quantity of time spent together. However, as I will discuss, I found that the lack of continuity in certain types of friendships to be a defining feature. This chapter describes both friendships that are lasting and friendships that have a duration that is contextually bound.

While my definition of friendship is similar to Corsaro’s, observing block play provided me with a different perspective on the types of friendships young children experience. Corsaro explored friendship processes along class, race, and international lines—contexts that are more global. By focusing on a specific area of the classroom, my focus was local; I explored the temporal and contextual nature of friendship types. As has been discussed, the block play area of a classroom has some general qualities that distinguish it from other areas of the classroom. I explain how these features and context underlie my observations of children’s social interactions and friendship.

I observed that due to the features of the block play area, specifically the block structures, social interactions could be sustained through the full morning choice time. Even if a child left the area, it did not mean that the play scenario needed to end. Structures could be knocked over and broken, but they did not vanish into thin air. Sometimes structures were even saved when all of the children building it had left the rug. The rule of cleaning up before leaving the area was not enforced consistently. The staying power of a physical structure is an important distinction from Corsaro’s observations. Corsaro (1985) observed that children had to be ready for play to end at any time because of their peers leaving (or being called over by a teacher) the play space without warning. Therefore, social connections in the block play area were less fragile or likely to end abruptly. There was more opportunity for sustained interactions. Additionally, the meaning children gave to certain types of blocks or materials and their structures could be
sustained and re-created. The stability of extended interactions allowed children the time to build new bonds or reinforce existing connections. It also allowed me the ability to observe social interactions more deeply because there was time to see an arch rather than a fleeting moment.

Block play research has not focused on social interactions amongst consistent pairings or with any further context of the relationship between the children. Generally, socially focused block play research does not distinguish between how frequently children choose to play together or what their relationship history might be. In other words, all social interactions are seen as the same. Cohen (2015) has focused on language analysis of social interactions in block play but used episodes of interactions and explored individual social development within group play. I found that including the context of the relationship dynamics between children allowed me to both learn more about the types of friendships that children have and how it impacts the way children interact and function in this collaborative setting.

**Best Buds**

Best Buds (BBs) are a term I used to characterize as a pair of children who had a stable and close relationship that persisted through the length of the school year, with a special connection that could seem like a gravitational pull towards each other. BBs consistently chose to build together, prioritizing each other over other children. It was rare for BBs to choose to build separately if they were both on the block play rug. Not all children had a BB. Some BBs looked for and waited for their BB to arrive at school or complete an activity elsewhere in the classroom. BBs often had a specific type of structure they preferred to build, which allowed them to begin building together without much discussion. BBs were observed getting into conflicts that could get emotional and escalate to yelling. However, these conflicts did not end play and the BBs were able to return to playing together. Finally, an important feature of BBs is that they
had shared adversaries. BBs would work as a combined force to protect against children they perceived as a threat to their sustained play or structure. Corsaro (1985) explained that there are specific functions that friendship provides, such as securing solidarity and mutual trust, gaining access, and the all-important protection of interactive space. Having a BB is the most assured way to utilize these friendship functions.

BBs consistently chose to build together, often going directly to their BB when arriving at the rug and jumping right in to build. BBs knew what materials they each liked to use to build or play, so a BB might grab these particular items to bring over, without being asked to do so. This made the building process for BBs more efficient. In Visit 14, Greyson was on the rug already and Hazel arrived at the block play area.

Greyson is the first one on the rug this morning. He takes out a cylinder block and the brown rocket block and sits right next to the block shelf, next to where I am sitting. He takes out more blocks, but only from the shelf he is sitting next to, which does not have the standard unit blocks. Hazel gets to the rug, quickly turns around to the stuffed animal shelves and gets a yellow bird and small beaver. She brings the small beaver over to Greyson. Hazel sits down next to Greyson, facing the shelves.

**Hazel:** Which one’s a hot tub? [looking at Greyson’s block formation, which is in an 8 shape]

**Greyson:** I don’t know…either one.

**Hazel:** [pointing to one side] That one’s the hot tub!

Greyson places his beaver in the circle, Hazel almost puts her bird into the circle too.

**Hazel:** Wait, no, neither of them are hot tubs!

Hazel puts her bird down into the circle now.

**Hazel:** Hey, maybe we should make some more!

There were only a few stuffed animal birds, and they were highly sought after (and fought over). However, Hazel did not get Greyson a bird—she got the beaver because she knew that was his favorite stuffed animal. Aligned with Repacholi and Gopnik’s (1997) famous study about theory of mind and children’s ability to recognize the food desires of a researcher (for
broccoli or crackers), even when they differ from their own, Hazel is thinking about Greyson’s perspective, rather than just her own.

When children were on the rug and waiting for someone, it was evident they were waiting because they would continually look at the front door of the classroom or mention the person’s name. To see the front door, children had to stand and look/move towards the north side of the rug, so it was clear what they were looking at. In Visit 39, Lucas kept looking at the front door, even though Liam was already on the rug to build with.

Lucas arrives on the rug. Lucas gets out a panel. He’s looking at the door/front of classroom. (He is waiting for Logan to come to the rug.) Lucas puts the panel down right behind Liam.

Shortly after Lucas had been watching the front door, Logan got to school and came to the rug to build with Lucas. Liam and Lucas typically arrived at the earlier end and would often decide to build together (or attach their structures). Lucas deciding to not build with Liam was not a snub to Liam, rather a desire to build with his BB. In Visit 48, Scarlett and Mia were building on the rug together and Sofia was not yet there.

Mia and Scarlett were briefly on the rug this morning. Scarlett kept telling Mia they needed to wait for Sofia.

I do not know if Sofia was even at school that day because she did not come to the block area, but Scarlett was holding a place for Sofia to join when she arrived at school. Scarlett wanted to make sure that she would be able to play with Sofia, even at the expense of frustrating Mia. This was another demonstration about Corsaro’s (2003) explanation of the motivation children have to be connected to friends because friends provide benefits of access and protection. Mia has a strong personality that was difficult for Scarlett, who is more soft spoken,
to advocate for herself alone. Sofia would provide the backup that would make Scarlett feel more secure in negotiating and building with Mia.

Since BBs built together so consistently, they were able to hone in on particular structure types that they enjoyed building together. This was also a contributing factor of the efficiency of the planning and building process between BBs. Mateo and Jackson built structures related to police or fire fighting. Their most common structure was a police station, which they would outfit with police airplanes and police boats. Towards the end of the year the police station became a full public safety hub by including fire stations and vehicles. One of the earliest examples of building this type of structure was in Visit 36.

Mateo and Jackson walk to the rug. Mateo says, “Let’s build a police station.” Mateo scoots around on the floor on his knees, Jackson follows behind. Jackson gets a red and blue triangle frame block. Jackson and Mateo go to the SE corner of the rug. Jackson holds two triangle frame blocks and walks it around like an airplane. Jackson picks up some frame blocks—he is looking specifically for blue and red. Mateo brings over a panel.

The particular blocks that Jackson grabbed were standard for their police station structures—namely, red and blue big cubes, red and blue rectangle frame blocks, and triangle frame blocks (for an airplane). They were so consistent in building this type of structure that if I was getting frame or big cube blocks, I would try to avoid taking the red and blue ones to leave them for Jackson and Mateo. Often Jackson arrived at the rug before Mateo and he would be able to get the building process started by gathering the needed supplies. When Mateo arrived, they did not have to waste time planning or preparing. This process is part of Jackson and Mateo’s sharing rituals (Corsaro, 2003). In other words, the repetition of structure type and supplies were patterned and cooperative expressions of their shared values and concerns. For Jackson and
Mateo, and potentially other BB pairs as well, their structure choice became a part of their identity of their relationship.

Lucas and Logan liked to build castles, islands, and houses—sometimes even a combo of all three (e.g., a castle on an island that is a home). By consistently building the same types of structures together, they developed typical elements of the structure, which might have seemed to be a less natural conclusion for others. While the specific structure type was not as strongly part of their identity as it was for Mateo and Jackson, certain elements of structures were. For example, three of the elements that were consistently part of Lucas and Logan’s structures were secret dungeons, moats, and elevators. I have not ever been to a real castle, but I do not typically associate there being elevators inside of a castle. I also do not think islands or hotels typically have dungeons, but Lucas and Logan’s usually did. Regardless of the type of structure, it was likely that one, if not all three of those elements would be included in Lucas and Logan’s structure design. It was beneficial to BBs to have standard structures or elements because they could join in quickly with a minimal number of questions or discussion.

For BBs, although many of their routines, rituals, and processes were streamlined, it did not mean that building together was always amicable. There was plenty of conflict that occurred between BBs, even some that required teacher support to resolve. One of the underlying purposes of block play is developing language and social skills for negotiation and conflict resolution (Cohen, 2006), and BBs did not miss out on this experiential benefit. What differed between BBs and other types of friendships was the speed of the recovery back to smiles and building together. When children who were not BBs were in conflict, it would persist throughout their collaboration, and often continue to bubble up to the surface. Those conflicts felt never
ending. For BBs, conflicts might escalate quickly, but they also cooled down quickly. In Visit 49, Scarlett joined Sofia on the rug and wanted to build with her.

Scarlett says to Teacher that Sofia is not letting her help. Teacher says to Sofia that she should listen to what Scarlett is saying. Teacher tells Sofia that she can tell Scarlett that she can build a certain part of the structure, or can tell Scarlett that she is building that part and that Scarlett can build her own thing next to Sofia. Sofia pulls the rainbow blocks close to her chest. Scarlett says that she’s not trying to take the blocks from Sofia. Teacher reassures Sofia that Scarlett just wants to play with her. Teacher asks Sofia which blocks she is using. Sofia doesn’t respond. Scarlett builds on the grass square and Teacher walks off the rug. Sofia and Scarlett go back to talking and laughing.

I remember being surprised when I heard Sofia and Scarlett laughing together because I had been listening to the conversation between the girls and the teacher. This was a starkly different aftermath than when Sofia had conflict with other children on the rug. For example, Sofia and Asher’s conflicts seemed to be omnipresent. However, when she had conflicts with Scarlett, they were able to repair it and move on. Lucas and Logan had some intense and loud conflicts, but always returned to building together. I did not find any instances of Lucas or Logan choosing to leave the rug due to an argument/disagreement with the other, even after the rare occasions that an altercation got physical.

While BBs battled each other at times, they also staunchly supported each other to protect against what they perceived to be a threat to their structure or play. The adversary was not always the same and a “threat” varied based on situational factors. BBs offered each other the protection of strength in numbers (Corsaro, 1985). During Visit 10, Lucas was trying to protect his structure from Mason joining when Logan walked up to the rug.

Logan gets to the carpet. Lucas tells Mason that he will not let Mason play on the structure. Logan sits down next to the structure. Lucas announces, “Another friend on my side!”
As Logan had just arrived, he did not know what was happening between Lucas and Mason, but Lucas assumed Logan would support him. In that situation, Lucas was feeling especially stressed about protecting his structure because Liam, Elijah, and Ethan were also working on a structure next to/attached to Lucas’s and it was a lot of action. Lucas viewed his BB Logan arriving at the rug as a guaranteed teammate against the other children. There were times when Lucas or Logan got into a conflict with another child on behalf of the other BB; sometimes even when their BB was not at all requesting their defense.

The strength of the bond between BBs mediated many things during block play and social interactions. Block structures are seen as a symbolic representation of children’s experiences and inner thoughts. Corsaro also said that block structures could be viewed as artifacts. When BBs are building together, the structure is additionally a representation of the relationship between the two children. By identifying BBs, social interactions, whether amicable or conflictual, are situated within a context that functions differently than interactions between any two children.

**Situationships**

Situationships is a term that I am borrowing from popular culture and using to mean a combination of the terms, “situation” and “friendship.” Situationships are context dependent and temporary in essence. Situationships are categorized by children joining together due to contextual factors, but disbanding upon the situation changing, such as block play time ending or children leaving the rug. Situationships can be fragile depending on the contextual components. While situationships might lack continuity, the components of a shared understanding between children that they are engaging together in building (not just parallel playing), and the interaction being collaborative and sustained, are both present. An important distinction between
situationships and two children just playing together is the relationship aspect. Situationships can be compared to context dependent adult friendships, such as having close work friends that you do not typically see outside of the office. In a certain context, friendship is strong and real, but not in other contexts. Beyond location-specific contexts, there are also other factors that create a situation for friendship that is not sustained outside of those bounds.

**Limited Options**

With BBs, there is an apparent intention to build and play together. A situationship characterized as “limited options” means that children were in some way restricted or chosen to be in the block play area, with no input on what other children were present. Limited option situationships means that, while children did not necessarily have a choice of who was on the rug, they have interactions that demonstrate they are communicating and collaborating as a team. In descriptions of social interactions during block play in the literature, limited option situationships of a collection of children chosen to be in the block area, or in a lab setting, are actually the type of interactions most typically written about, albeit without using my terminology.

One type of situation where the children in my classroom were on the rug with other children, they had not necessarily chosen to play with was due to a particular schedule change the teachers made. When the weather warmed up, the teachers decided that only some children would stay in the classroom during the morning free play time and others would go outside to play. Usually, around eight children were held back in the classroom. Their choices were only the block play rug, reading books, or finishing a special project. The children that were chosen to stay were sometimes based on who needed to finish projects, but the teachers also made an effort to diversify children who did not typically choose to play together or visit the block play area. In
Visit 73, Luna and Asher were two of the children chosen to stay. I was building together with Asher, though our structures were separate. Luna tended to build solo, and I am not sure I had ever seen the two of them interact and play together in the block play area before this day. At first, Luna was apprehensive about joining Asher to build.

**Me:** Hi, Luna!
**Luna:** Hi!
**Me:** Come play with us!
**Luna:** Well, the thing is, I don’t want to play any war things or things that’s like…
**Asher:** Fighting?
**Luna:** Yeah.
**Me:** Oh, we’re not playing anything war or fighting.
Luna decides she wants to build her own thing.

**Asher:** If you want to come to my house or Missi’s house, you can build a bridge. Luna decides she will build her house close to Asher’s and then there will be an invisible bridge or a path. Asher says he’s going to make a bed in his structure. Luna says she is worried about being near Asher’s building that if there’s “too strong of a wind” it will fall down and knock hers over.

The strong wind concern, as we were indoors with no wind, was most likely about Asher’s history of knocking into things in the block play area, both intentionally and unintentionally. Despite her initial resistance, Asher continued to try to persuade her to join by giving her options.

Luna had another concern about joining, which she shared with Asher. Then, an unintentional block tumble brought the two together in collaboration.

Luna says, “The thing is, there’s one more thing. I don’t want people to call me anything like ‘Donkey’.” I ask if her comment is directed towards Asher and if he has ever called her that before. Luna says that Asher has not called her that before, but she’s just worried that he will call her Donkey. At that moment, Asher places some long unit blocks on his top panel and the structure starts to wobble, one leg collapsing. I try to grab it. Luna picks up one of the legs to help Asher. The teacher brings an additional XL unit block to put in the middle to help it balance better. Luna asks if Asher can help her with the XL block she is trying to fix.
Not only was this a situation where Luna and Asher had limited options of who to build with, but when Asher’s structure collapsed, the situation caused Luna to jump in to help. Movies use this type of “meet cute” situation frequently, where one-character drops all of their belongings and a stranger swoops in to help pick them up, to establish a relationship between two otherwise unconnected people. Luna and Asher’s interactions became a situationship instead of just two children building on the rug at the same time. There is further evidence that Asher and Luna were building cohesively when Asher invited Luna to come to his (block) house.

Asher invites Luna to come to his house. He says that he has sweet food. Luna asks him what sweet food means. He says, “Gummies, and ice cream, and candy.” Luna asks him if he knows her favorite ice cream flavor and then tells him it’s chocolate. Asher tells her what his favorite flavor is.

For children, sharing about their favorite thing in a category, such as ice cream, is a way to socially connect. Especially in a classroom like ours that emphasizes community, children were frequently encouraged to use their words and find things they have in common with their classmates. Teachers particularly encouraged this behavior for children trying to join in playing with others. Although purely speculative, I do not think that if Lucas, Logan, or Ethan had been on the rug that Asher would have tried to get Luna to build with him. However, there was some support evidence for my suspicion because Asher and Luna’s situationship ended when Liam arrived on the rug. Asher immediately asked Liam if he wanted to build together and then told Liam that he was making a castle. Luna remained on the rug but built her own house-boat structure.

**The Outside World**

Children have experiences where they run into each other or interact outside of the classroom. Sometimes the excitement of seeing each other outside of the classroom context is
excitement enough for making a connection the following day at school. Usually if children see each other outside of school, it is announced to teachers or other children in the classroom. The most striking example of children choosing to play together after an out of school experience was Asher and Hazel in Visit 76, the day after they ran into each other at swim class. Asher and Hazel often butted heads, especially due to their tendencies to be the protectors of their groups.

(The following excerpt has been abridged for length).

Asher and Hazel arrive at school at the same time. Asher was very excited because he had seen Hazel at swim class last night. Asher was telling every single person that he saw Hazel at swim. They are the first two kids to make their way into the classroom area.

**Asher:** Hazel, do you want to make a castle?

**Teacher:** That was such a nice invitation!

**Asher:** I saw Hazel at swim class.

**Teacher:** Yesterday?

**Asher:** Yeah. We weren’t in the same class. Hazel, what do you want to build?

**Teacher:** I heard Asher invited a castle, but it’s so kind to think of what you want to build.

**Hazel:** I don’t know…

**Asher:** Maybe we can build a house?

**Hazel:** Okay!

Asher takes out a panel and gets an XL unit block. He tries to balance the block vertically on one of the corners of the panel. It is wobbly and falls. I suggest he could use a helper. He asks Hazel if she will help him. Hazel steadies the block and then goes to the shelf to get another XL unit block. Asher and Hazel discuss the structural stability and plan collaboratively of where to place blocks to make it sturdy.

**Hazel:** The one in the middle helped, didn’t it?

**Asher:** It did.

Asher and Hazel get the panel to stay on top. Asher goes to the shelf to get blocks. Hazel checks on the blocks to make sure they’re steady. Asher puts blocks on top of the panel and tells Hazel, “That’s the playroom.” Hazel comments that it’s still wobbly on top.

Asher gets more blocks.

**Asher:** My bed, this is, this is, my bed, and here’s the kitchen.

He places his wooden person on top. The yellow big triangle frame blocks are what he calls his kitchen. Initially he places the kitchen up top, but then decides to move them to the ground panel.

**Hazel:** Are we making a house? This seems more like a…

**Asher:** House? Yes.

**Hazel:** Like a castle.

**Asher:** It’s a house.
Asher places rectangle frame blocks between the blocks on the ground panel and says that those are TVs. He places another and says, “Here’s the sofa.” Asher and Hazel discuss each of their designs. Asher offers to Hazel that she can sleep in the bed he is making because it is a bunk bed. Hazel declines because she has her own bed. Asher tells Hazel that he wants to bunk up with Hazel, so Hazel makes a bed next to hers and invites Asher to sleep there. Asher and Hazel continue to work together, eventually they also play in their structure.

The interaction between Hazel and Asher lasted a significant amount of time, even continuing when other children arrived at the rug to build. I was worried that my presence would in some way interrupt their interaction, so I scooted myself to the corner of the rug and tried to not even make eye contact (or make them feel like I was observing them). In the previous example of Asher and Luna, when Liam arrived at the rug, Asher turned his attention to building with Liam, and Luna worked on her own structure. However, their excitement-fueled connection was able to withstand other children arriving. Lucas was one of the children that arrived on the rug and that did not pull Asher away from working with Hazel. In fact, in an effort to defend Hazel, Lucas had taken all of the arch blocks and Asher told Lucas that he “can’t have them all” because Hazel wanted one for their structure. Hazel had not asked Asher to do that, which is similar to the behavior of BBs. In another moment reminiscent of BBs, Hazel got Asher a carpet square to use as a blanket for a bed before Asher expressed that he needed one.

Similar to the limited options scenario, needing help to stabilize the building strengthened their relationship because they had to come together to problem solve. While the situationship was formed on the basis of an outside of school experience, the physical block structure reinforced the connection. Block play has been touted as being very valuable for STEM skills and cognitive development because children learn in a practical and meaningful way about balance, gravity, and other engineering principles. Block play literature strongly encourages teachers to support structure-related problem solving by trial/error and problem solving with
peers (Tepylo et al., 2015). When I suggested that Asher ask for help, it came from what the classroom teachers had been saying, especially phrasing it as a suggestion of an option rather than a directive.

There was another moment during the morning when Hazel and Asher’s structure collapsed. There was a very brief discussion, facilitated by the teacher, about how it had fallen, but Asher and Hazel were too focused on fixing their building. Hazel and Asher sat side-by-side rebuilding and discussing what else needed to happen to get their structure back up and stable. There did not seem to be any disputes about how they would rebuild. They were like a construction team that had been working together for years. Sometimes when structures collapse, it is very upsetting and stressful for the builders. There were plenty of times when a structure collapse resulted in accusatory finger pointing and a dissolution of the building team. Yet, Asher and Hazel’s bond remained intact. While the teacher and I were concerned about the fragility of the situationship, they actually seemed to have formed a rather strong connection that came about quickly and lasted through literal disaster.

This relationship was temporary, which is of course different than BBs. When block play ended for the day, Asher and Hazel helped to clean up and then went about the rest of their day. I am not sure if Asher and Hazel spent any more time playing together that day, but they never built just the two of them during the rest of the year. Although it was temporary, their interaction was more than just transactional. They exchanged ideas, they compromised, they adjusted their own plans based on the other person’s ideas, and they helped each other. Without the context of knowing the history of interactions between the two children, situationships present as two friends just building together.
Groups

Children do not just build together in pairs. Especially due to the collaborative nature of the block play area that I have discussed many times, building and play tends to involve multiple children. Corsaro (1985) stated, “Children develop stable relationships with multiple playmates to maximize probability of success for entry into play.” In other words, forming friendship groups serves an important purpose for children. To be identified with a group helps with joining and building together. Not only do friendship groups help to secure access socially, in the block play area it also helps to secure more space and materials than a child could by themselves or as a pair. In the chapter on building together, especially when children figured out how to build their own structures and connect to others, a group of friends could quickly take over the majority of the rug. Even when children want to have control over their own ideas, they are highly motivated to connect socially.

One challenge of studying friendship groups in this age range is that it can be hard to distinguish between a group of children playing together and an established group of friends. I have distinguished friendship groups from a collection of children playing together by applying similar characteristics of dyadic friendships that I have discussed previously in this chapter. To be considered a friendship group required evidence of consistency and regularity of building together, with in-group shared meanings that are not shared by other children on the rug.

Children’s social groups are influenced by outside factors, such as their parents being friends or sharing the same bus/van to get to school. The beginnings of friendships that develop into a group of friends are not always rooted in classroom interactions or experiences. This classroom of children also had all been in a class together the prior year, with the exception of two new students (and me). So, some children had friendships and social experiences that had
been established prior to this year. However, the outside or history of connections were not enough to define or solidify a group. I cannot say for certain whether or not friendships were formed solely due to time in the block play area.

Groups tended to have a “core” of around three or four members. Groups had some fluidity and ambiguity about who was a part of the group. However, the way that I identified who was in-group, and the presence of a friendship group, was the shared understanding of ways of doing things, what materials represented, and how information was communicated. I found that groups seemed to be created and reinforced through structure narratives, which included both the type of structure and how the structure was played with, that persisted for multiple visits in a row. By structure narratives, I mean not just the type of structure built, but the story or play happening inside or around it. In other words, a group would get locked into building something, such as a hotel. The type of structure would be serving some type of play purpose. Over the course of at least a few school days, if not longer, the group would be invested in the structure(s) and the game or activity they would use the structure(s) for. Even when the game or narrative fizzled or changed to something new, the experience of creating and recreating the structure was so concentrated and consuming that the bonds of group membership were strengthened and sustained.

An early example of this was the ramps built by Sofia, Scarlett, Greyson, and Hazel. Over the course of a few visits/days, they went from making ramps for rolling materials down to creating full games of sending different types of materials down the ramp and watching both the speed and how they land. In Visit 5, Sofia and Greyson tested out materials.

Sofia takes out some plastic pandas and tests the ramp. The first ramp is not steep enough for the panda to slide down. Teacher shows us that another big block can be added on top to make the ramp have a steeper incline. Sofia slides a panda down the taller ramp and it
rolls/slides all the way down. Greyson tries sliding a panda down as well. Sofia gets small cube blocks and tries those.

In Visit 15, Sofia, Scarlett, Hazel, and Greyson continued their ramp play with an even more developed bird game.

Greyson walks over to see what’s going on with Hazel and Sofia. He goes back to get his stuffed animal and brings it back to the slide/ramp. He places his stuffed animal at the top and lets go, watching it slide down. Hazel and Sofia also do this with their stuffed animals…Sofia tells Scarlett that there’s a slide for the birdies and tells her to come over. Scarlett goes over and puts her bird down the slide. Sofia puts her bird down the slide. Hazel returns to the rug. Sofia and Scarlett take turns sending their birds down the slide.

Making ramps in the block play area only lasted a couple weeks or so. The next evolution was creating homes for the stuffed birds (and Greyson’s beaver). Eventually, the four in this group were not spending much time in the block play area, but they remained a strongly connected unit. As discussed earlier, Sofia and Scarlett, and Hazel and Greyson, were BBs. Scarlett and Hazel were the two new students, so there was not any history of friendship that influenced the four children in forming a group.

Similarly, to situationships of dyadic friendships, there were groups that formed in the block play area that were not sustained in other areas of the classroom or school day. These context-dependent groups could be compared to a book club where the members are not necessarily all friends, there is some fluidity to the group, and they are gathered around a shared interest (of the book or the snacks). Differently than situationships, these types of groups played together many times and were fairly consistent in what they did together. Context/situation dependent friend groups fit the same criteria for being labeled a group as the groups that were more sustained friendships. In contrast to other groups mentioned so far, it was clear that groups based on a shared interest were formed in the block play area.
One of those types of groups I named the “Boat Club.” For the BC group, one thing in particular seemed to be the glue that brought and kept them together: boats. Boats tended to be a type of contagious play. Many times, when other children saw boats going around the rug, they too wanted to build their own boat. While boats were separate and individually created, they moved around the rug with a group play theme. Sometimes it was pirate ships, sail boats, cargo ships delivering important supplies, or shooter/bomber ships attacking or protecting against bad guys. The element that distinguishes BC as a friendship group is that they were not just making a boat to build on their own, their purpose for boat building was to play with the other members of the group. They all loved making boats and moving them around the carpet. The BC fed off of each other in their boat designs, often one-upping boat features announced by one of the others. Boats were typically made out of XL unit blocks or a wooden panel, with other sizes of unit blocks added on top. In Visit 83, Liam, James, and Mason were making battle and cargo ships.

Liam says his ship is a battleship and a cargo ship. James says that battleships have airplanes and bombs that explode. Mason says his is a battleship, too. James knocks the cargo (bricks) off of his ship and narrates what is happening. Liam comes over and grabs a brick from James’s pile.

For this group, boats tended to turn into some type of battle/fighting ship. However, the battles were almost never against each other; the group banded together to fight against an imaginary threat. In Visit 87, the group came together to fight a war.

James says, “You gotta come down here, Ethan, because there’s a war going on!” James is making shooting noises with his mouth. Ethan rushes over by James. Mason tells me that he has 3 pewers on his boat. James says that he has 3 pewers on both sides of his boat. Ethan tells me about how he tricks other fighters by sitting with his boat and then starts shooting. Ethan moves his boat around the structure slowly saying “pew-pew, pew-pew-pew.” Ethan continues to narrate the fighting battle. Mason tells me he is making a motor fight boat.
James called for Ethan’s help and Ethan went running over to support his group member. Mason used the word “pewers” and then James used it, knowing exactly what the term meant. James had to explain to me what they were saying. Once I heard it, the terminology made sense, but they already had a shared understanding and used the word as if it was a real, typical word. Banding together as a team to fight imaginary bad guys was not the way all of the children played with their boats. For example, Logan and Lucas’ boats tended to be some type of carrier ship (or houseboat) moving cargo, pandas, or people from one dock to another. The BC had a shared understanding of what they would be playing with the boats once they were built.

My understanding of groups of friends in the block play area feels strong because I actually became part of a group. The situation of becoming a member of a group happened during the “Pizza House” days. Something interesting and special happened during the Pizza House days that demonstrated, and solidified, me as a member of the group. The Pizza House was a structure that I had built, that was originally intended as a house-with-no-kitchen. In Visit 55, Logan arrived at the rug, and I told him I had built a house, but since there was no kitchen, I could only get drive-thru food from restaurants. For some reason, Logan and I started talking about pizza rocket ships and how cool those would be if they were real. Then, Logan started handing me “pizzas.”

Logan hands me a square unit block and says that’s a pizza. He tries to hand me another one but I hand it back and say I just need one pizza. Logan drops the block onto the carpet. Lucas takes his person on a frame block along the bridge to my house. I tell Lucas to come on over because there’s a pizza in there to eat. Logan asks if he can go to my house and I tell him yes. Logan puts a square unit block on his boat/car and says he’s bringing me another pizza. Logan puts the pizza in my house. Lucas gets a regular unit block and brings that with his vehicle and says he’s bringing a pizza. I comment that we’re going to have tummy aches after all of this pizza! Lucas says, “Here it is!” and places the pizza into my house. Logan stands up and says, “Sorry, I gotta go buy more pizza!” Logan gets another square from the shelf. He puts it on the back of his frame block and drives it up. He puts the block into my house. Lucas takes his frame block and
says, “Sorry! I gotta buy more pizza!” Lucas gets squares from the shelf. Logan comes back with two more squares. Lucas brings three more squares. I laugh that it’s going to be so squishy and pizza filled. Lucas, in a very animated voice, gets more square blocks and says, “Two more pizzas!”

Logan and Lucas continued to fill my house with pizza, switching to other types of blocks when we ran out of square unit blocks. This was the creation of the game Pizza House that lasted from Visit 55 to Visit 60 (2/28/22 – 3/10/22). In Visit 57, I had built a boat house. Lucas was on the rug, but Logan had just arrived. Mason was making a boat on his own but was continually trying to show me and tell me about it. When Logan arrived, he immediately announced his intention to have another Pizza House party.

**Logan:** We’re going to have a pizza party!
**Me:** Another pizza party?
**Logan:** Yes!
**Me:** Not on my house boat!
**Logan:** Yes!
**Me:** No, no, don’t break it. You can make a different house for a pizza party.
**Logan:** No.
**Lucas:** We’re going to put it into yours.
**Me:** Yeah, but that’s going to break what I built. I’ll build another little house over here.

Logan was not just trying to take over what I had built—my structure had been The Pizza House the previous two visits. Similar to how Logan and Lucas often joined each other without formally asking, Logan was joining me with the presumption that we would be playing together. I had become a core and essential member of the group. While I worked on building a new structure to be the Pizza House, Mason continued to try to get my attention and I told him that I was working on building something. Although Mason was on the rug and Mason and I would build together regularly, there was a clear delineation that he was not part of the Pizza House group (he was not excluded—he had chosen to build his own thing). In Visit 58, we were again
playing Pizza House and Elijah wanted to be a part of the group. Elijah offered some blocks as pizzas and Lucas told him they were not the right kind of blocks.

Lucas says, “Where is the other pizza? I’m hungry and I need 100 more pizzas!” I tell him it looks like he has to go get more pizzas… Lucas loads up an XL block with lots of smaller unit blocks. He announces that his enormous ship of pizzas are on their way. He tries pushing it around the carpet without dropping any. Lucas says, “Straight for Missi’s house!” Elijah steps over the panels behind where Lucas is pushing his boat. Lucas invites Elijah to come eat a lot of pizzas. Elijah says he has pizza, but Lucas tells him that it’s not the right kind of pizza. Elijah says okay and heads for the north shelf. Lucas’s ship of pizza arrives at my house. Logan points to Elijah which blocks are pizzas. Elijah is holding two square frame blocks and says, “These are only pizza dough!” He places one of the squares in the house. Lucas begins placing square unit blocks inside/on top of my structure. Elijah says, “Why do you have so many pizzas?” I say, “We’re having a pizza party!” Logan has a frame block with some unit blocks on top of it and is pushing it along the carpet towards my structure. Elijah gets three more square frame blocks and puts them on top of the structure. Logan, Lucas and I discuss whether eating 100 pizzas would be good for us. Elijah says, “Did the party start yet?” I say, “Yeah” and Logan yells, “No!” Elijah says, “I’ll get some more pizzas!” Lucas says, “We need more pizzas!”

Once Elijah had gotten the right kind of pizza block, Elijah became a member of the group and quickly shared in the urgent need to get 100 pizzas. Again, my structure was at the center of play, and I was an essential member of the group. During all of these days, no one else became the architect of the Pizza House. For children who are four to five years old, when they see something, they like, they want to imitate or do it themselves. I would have typically expected the children to all want to build their own Pizza House to watch it get knocked down. Aligned with Corsaro and Eder’s (1990) theory of children wanting to have control over their own play, having my house be at the center of this game gave children less control, but the desire to be socially part of this game was motivating enough to relinquish control. There were some days in between these visits where I was not in the classroom (based on my typical visit schedule) and the teachers told me that the children did not play Pizza House without me.
There was a moment in Visit 60 that made me realize that I was really a member of the group, and that there were other children who were not members of the group, and therefore were not privy to the routines of this game. During that visit, Amelia and Rylee wanted to join Lucas, Logan, Elijah and I in building. Up to this point, Amelia and Rylee had not been on the rug during Pizza House days, so when they asked what we were building and we said Pizza House, they did not know it had been an ongoing game. When they asked to join, one of us had told them they could join the game when we were done building.

Amelia has her people on the path. Logan stops them and says, “No!” I tell them that we’re not quite ready yet. Rylee holds up a triangle frame block and a square frame block. She says to Elijah, “We got the pizza! We got the pizza! And the milk.” I turn to look over my shoulder to see what Rylee is holding. Rylee puts her triangle frame block down on the carpet in front of Elijah and says, “This is the pizza.” Elijah says, “No it’s not.” Rylee says, “Yeah it is, this is the other pizza.” Elijah says no again and Rylee says, “This is the pizza at OUR house.”

During that moment, which I discussed in my theoretical notes from the visit, I had thought to myself, as Elijah was saying it out loud, “That’s not pizza.” The realization hit me that I thought the same thing that the other members of my group were thinking only certain blocks were pizza. Just two visits prior, Elijah had been told which blocks were considered “pizza” and now he was the one telling other people that their blocks were not pizzas. Our group was being solidified and reinforced by a shared understanding of the meaning of certain blocks and the routines of this game.

Without intending to, in my field notes I referred to Ethan, Lucas, Logan, and Elijah as “my crew.” Prior to Pizza House, I referred to that group with a variety of titles, such as “Lucas’s crew” or the “block regulars.” But then they became “my crew” in my mind. In Visit 82, parents came to the classroom to look at the children’s portfolios and see the room. I wrote in my field notes, “Especially when meeting the parents of my crew—Ethan, Elijah, Lucas, and Logan—it
was fun to hear the parents tell me that their child comes home and talks about block play with them.”

Conclusion

As all of my findings have demonstrated, the block play area is a very social environment. The contextual components of the block play area, and block structures, provide an environment that supports the forming and strengthening of social connections and friendships. Some friendships were pre-existing, and some were formed in the block play area, but all were fostered by interactions within the peer culture of the block play area. The physical block structures allowed for more sustained interactions, compared to other areas of the classroom, such as dramatic play. I found that there were different types of dyadic friendships, including Best Buds and Situationships. In all types, there is a special connection between the two children that is intertwined with the processes and cultural routines of the block play area. I also found the presence of friendship groups. The groups functioned almost as their own sub-cultures. Within groups, there was a shared meaning of language and words, along with a shared understanding of what they were playing. Groups tended to form and be reinforced surrounding the play narratives of structures.

These findings extend Corsaro’s theories about friendship in early childhood classrooms. Whereas Corsaro’s work incorporated higher-level factors, such as race and social class, my examination was more localized and temporal. Corsaro found that friendships were fragile and frequently ended abruptly. My findings demonstrated the role of the block play area and physical structures in children’s ability and opportunity to sustain interactions and friendships. I also found that the structures were artifacts of the friendship. The types of structures built and the way they were played with had their own cultural routines and meaning.
Block play research continually identified the benefits of block play for children’s social and cognitive development. Block play both requires and improves children’s skills such as language, problem solving, negotiation, and spatial reasoning. My findings recognized how the cultural routines and processes of friendship supported the pedagogical goals of block play.
CHAPTER SEVEN

CONCLUSION

Teacher: Now how do we start organizing?
Ethan: From the top!

Overview

The above conversation between the teacher and Ethan was on my very last visit and the very last line of my field notes. It seemed a fitting quote to start this final chapter because it represents the repetition, reappropriation, and routines of peer culture from an interpretive reproduction lens. In that moment, we were about to take down the structures, starting from the top and working our way down to limit block falling chaos, and put all the blocks in their places so they would be ready for the next day. Each day children gave blocks meaning, shared that meaning with their peers, created whatever structures they could imagine, and then disassembled back onto the shelves. Interpretive reproduction recognizes the process of the cyclical and dynamic ways that children develop cultural routines and shared meaning.

In my review of the literature, I explored the history of block play and the intersection of child development, block play, and peer culture. Researchers have helped to position block play as an essential classroom activity through identifying the value for children’s development and learning (Brown, 1942; Chalufor & Worth, 2004; Tunks, 2013; Aksoy & Aksoy, 2017). Researchers have found that block play supports all of the developmental domains: cognitive, language, social, emotional, and motor (Hirsch, 1984; Rogers, 1985; Montopoli, 1999; MacDonald, 2001; Newburger & Vaughan, 2006; Lightfoot et al., 2012; Phelps, 2012). There is
virtually nothing related to child development that researchers have not attempted to link to block play.

Block play may be such a powerful activity because of how meaningful the work is for children (Provenzo & Brett, 1983; Tepylo et al., 2015). Wooden unit blocks can be transformed into anything children can imagine because they are plain and simple, allowing children to use them to symbolically represent whatever they wish. The block play area is an ideal setting for observing social interactions because the open-endedness of wooden unit blocks increases children’s need to interact and communicate what they are making or what a certain type of block means. Children can make the blocks be anything, and they do. I saw blocks become ships, pizzas, habitats, lasers, and more. That does not just happen, blocks do not on their own turn into objects. Children make that happen collectively with each other. Children are taking both the blocks and the pedagogical theories behind them and making it all their own. Children have collective agencies to manipulate the world around them. This is at the heart of why studying peer culture in the block play area was a great fit.

Through a theoretical lens of interpretive reproduction, the goal of this study was too deeply exploring the peer culture of children in the block play area. As the majority of block play research has been identifying value for individual children’s development, interpretive reproduction conceptualizes the inclusion of children’s roles in their own development and learning that happens from peer to peer. Peer culture of children is within the context of the world around them, from their families to societal influences. From the earliest literature on block play, there was a belief that unit blocks were an opportunity for children to recreate their experiences or thoughts without having limitations or barriers (Johnson, 1933; Layman, 1940; Provenzo & Brett, 1983). Block structures are artifacts of children’s peer culture (Corsaro,
they are physical demonstrations of the way children are adapting, appropriating, or reproducing their experiences and knowledge with each other.

**Discussion of Findings**

My research questions sought to find answers related to how children manage their desire to be collaborative while also protecting and controlling their own play through cultural routines, negotiation, and social interactions. The three main focus areas were about children joining or being joined, navigating building together, and types of friendships. Across all three findings chapters, the role of blocks and physical structures, along with the development and management of cultural routines, were identified as being cornerstones to children’s peer culture.

**Blocks and Structures**

Throughout all of my findings, there was one element of the peer culture in the block play area that kept coming up as central to patterns of interaction: the physical blocks and structures. Although Corsaro has described some block play scenarios in his vast collection of articles and books, there so far has not been a peer culture study where the actual structures, as opposed to social structures, have been studied as a main piece of the peer culture. Going into the study, I was hoping that there would be some intertwine between peer culture and the actual block play, but what I found was even more than I had expected. From joining, to building together, and friendship development, the structures had a mediating impact. It is not just in the symbolism of the activities of block play where children construct and deconstruct their structures every day, only to reconstruct them the next day. Having a physical element gave children a central focus, a grounded base, and a concrete, visual representation of their creative thoughts. Children did not just play “king and queen,” they created castles with rooms, guards, dungeons, and characters with various jobs or purposes.
I found that children were rather direct when asking to join building, which is in contrast to Corsaro’s findings that children avoided direct joining strategies. Corsaro theorized that children did not use direct strategies because they were worried, they would get a negative response. When children are trying to protect their play so that they can keep playing what they are playing, adding in a new member to the play scenario can be risky. With block structures, children often had plans that involved making large structures, which could be built faster and bigger with more builders. Children’s motivation for allowing others to join is different in the block play area than in dramatic play or pretending games scenarios. The structures also provided a concrete thing to ask to join. In dramatic play, a child wanting to join might have to scope out what is being played to figure out how to join. In block play, children saw the structure and had a quick visual clue of what was being built or played. Indirect strategies also benefited from the physical structure because the locus of play was visual; children could see where the action was happening. If children are running around the playground or moving about the dramatic play area, it is harder to tell where the focus of play is. With block structures, children knew where they could position themselves to try nonverbal or indirect strategies.

Having blocks and structures also allowed children to physically blockade other children from joining or “visiting.” Children did still sometimes use invisible walls or barriers, but if they did not want another child to get through, they could put blocks or structures in places that impeded the movement and access for other children. This came up frequently when children were building tracks or roads on a large scale across a full carpet. To build such an expansive structure creation, multiple builders were needed. However, once the tracks were built, children wanted to be able to have control over playing on the tracks, especially since they usually were only wide enough for one block train/boat/car to get through at a time. In other types of play,
children might have to continually remind another child of boundaries or constraints, but in block play, children could build the barrier and then focus on other parts of their play or structure.

When it came to building together collaboratively, the way structure ownership was defined was able to be redefined through altering the process of how structures were built. In the beginning of the year, children typically built as a group working on one structure. When this became frustrating for children who wanted more control over their own building process and structure design, structures became more modularly built in order to be able to claim certain parts of the structure. Then, children started building separate structures and connecting them in a shift to have more autonomous control and agency over their whole structure. When children began having separate structures that were connected, it went from children being in close proximity trying to work on a central structure, to children spreading out and having more space to create. This dynamic connection between peer culture and structure designs was a very exciting thing to find because looking back at the videos, I could see visual evidence of a cultural change.

Block structures allowed social interactions to sustain due to there being less of a threat that one child leaving or arriving would end their play. Children could continue working on building their structures throughout the whole morning time; it would be extremely rare and quite impressive if children sustained the same dramatic play or pretending game consistently through an entire hour or hour and a half of free play time in other areas of the classroom. Structures could even remain as children left the rug, allowing them to return back to the same structure later in the free play time.

The types of structures children were building also became intertwined with their friendships. BBs especially would often build the same types of structures, such as castles or
police stations, consistently together. Structures could be artifacts, symbolically representing children’s thoughts or experiences, but they could also be artifacts representing cultural routines of friendships. Structure building, or even structural collapses, could also reinforce connections between children who were in situationships. Children were drawn together to help each other solve or reconstruct a tumbled structure. Some of the types of structures children created, such as balancing a wood panel on top of four vertical unit blocks, required a second set of hands to help stabilize. For friendship groups, the structure could be the central element of reinforcing cultural routines of the group. My favorite example was the days of the Pizza House game. My house structure was the central component and made me an essential member of the group. Even though the pizza house game only lasted for a handful of observation days, it redefined my social status on the rug and developed a shared understanding of the meaning of certain blocks or structure types.

**Cultural Routines**

Cultural routines means when children creatively appropriate processes that they see in the adult world and then produce and reproduce them in their own cultures (Corsaro & Eder, 1990). The reason that children are creatively appropriate is because they are seeing things they do not fully grasp or understand and then trying to use it with peers. In the block play area, cultural routines were foundational to social interactions. For example, when a child did not want to let another child join in building, they used strategies that might have been informed by the adult-world, such as the types of reasons that are acceptable to use that would not get them in trouble. Cultural routines were embedded into joining strategies, access denial strategies, building collaboratively, and the ways children behaved as friends to each other.
Rules are at the heart of cultural routines, whether behaving within formal rules set by teachers, or rules that children create or adapt. I thought that secondary adjustments, when children change the adult rules in some way to serve their own purposes, would be more prevalent in the block play area. What I found was that there were very few times that this happened, or at least in the way that it has been previously described in Corsaro’s work. I expected children to use the “only x amount can play here” strategy frequently, but it was only used on a few occasions. Sometimes children tried to sneak items from home into the block play area to use to play, but not enough for any pattern to be identified. Instead of secondary adjustments to formal rules, children frequently adapted or shifted their own rules, such as the process children went through of identifying ownership of materials and structures.

Negotiation in the block play area has been described as a value of block play because it is linked to many developmental skills from language to problem solving (Hirsch, 1984; MacDonald, 2001). Corsaro has also examined negotiation, and conflict, as central to peer culture. There were an abundance of examples of negotiations and conflicts that occurred in the block play area, and they varied from calm and transactional to intense battles for control. I even had my fair share of negotiations, that sometimes turned into arguments, with the children. These types of social interactions were unavoidable and part of the essence of space. The cultural routines of negotiation and conflicts were a part of joining, building together, and friendship types. When children wanted to join, or if they were being joined, negotiation played a key role in setting expectations or boundaries. Conflict and frustrations were what pushed along the shift in how children were defining ownership of blocks and structures. These conflicts occurred when a child wanted to have more agency and control than the current collaborative building allowed. Negotiations were part of friendship types as well. For BBs, negotiation and discussion is what
allowed them to work efficiently and return back to building quickly after a dispute. In situationships, children had to navigate negotiation carefully to sustain the relationship. Asher negotiated with Luna to get her to join the building and with Hazel as they built and recovered from structural collapse. Negotiation and conflicts were the engine driving cultural routines of their peer culture.

**An Atypical Adult**

My role and positionality within this study was an important component from both a methods and findings standpoint. I think that being able to be as participative of an observer as I was gave strength to my findings. Sometimes researchers feel that they need to minimize their role or try to position themselves at the edges of social dynamics in order to get the best data. For some studies, that might be the best method. However, had I not placed myself as much in the middle as I did, I would not have had the same level of breakthroughs and insight.

Corsaro faced different challenges than I did because he is tall and male. I am a little closer to the height of children, female, and look similar to many teachers or authority figures children see in schools. The benefit of this was that I think kids warmed up to me quicker and were less skeptical about my presence than the experiences Corsaro has described. But my main challenge was to get the kids to see me as a friend and not an authority figure or teacher. For some of the children, that was a quick switch, and they preferred the option to ignore me. For others, even late into the school year, they looked to me to resolve disagreements or to perform in front of. However, I did not get the sense that children were changing or restricting their behavior from concern they may get in trouble.

The biggest challenge for me in terms of joining in with the kids was when children were playing out an imaginative/dramatic play scenario. There were some things I could easily join in
with, such as building structures or creating and moving vehicles around. I think it was easier to pretend when it was based around blocks or structures. I had a hard time joining into the “let’s pretend…” situations. For example, I would be handed a stuffed animal and a child would tell me, “Let’s pretend we’re a family.” The child would then continue to guide what was happening, continuing to push the narrative along. Sometimes the child or group would look at me like “why aren’t you doing xyz with your stuffed animal?” Although in those scenarios they had some type of structure, such as a bird habitat, the narrative was not based on the structure, the structure was just more of a backdrop or prop. I could sense some frustration that I was not able to be an equal scene partner and it would quickly turn into a child and adult playing, rather than two friends. The result was that I was much more involved in the structural design and building plans process than pretend play aspect.

The Children

Children’s Personalities

Something to consider about my findings is the impact of the personalities of these particular children and the potential for generalizability to other classrooms. First and foremost, generalizability is not a goal of ethnographic research. Every classroom context is different, and every group of kids will have their own peer culture, developed, and reinforced with each other. The goal of ethnography is to highlight aspects of a particular culture that could help to inform the understanding of the meaning other people are making out of their experiences in their own cultures. Additionally, I cannot speak to children’s personalities in other areas of the classroom or other parts of the school day. Sometimes when children are very excited about or motivated by an activity, their personality might seem more assertive than typical. I don’t know if the
children who took on leadership roles in the block play area were due to personality or the context.

Personality and peer culture are intertwined because children’s personalities influence their behaviors and interactions. While a child such as Lucas seemed to be an authoritative leader, the peer culture also reinforced the need for someone to be in charge to build in a coordinated and efficient way. I think that despite this classroom being an eclectic collection of personalities and characteristics, there are general types of personality profiles that would likely be identified in other classrooms with a different mix of children. As I mentioned, having someone acting as a leader or in charge is an important role for group structure building. Had Lucas not been in the classroom, or even on days when Lucas was not in the block play area, I saw other children take on this role. Liam did not seem similar to Lucas in terms of personality, but in the absence of Lucas, Liam behaved more as a leader, instructing other children what blocks to get or what parts of the structure they could work on.

**Gender Dynamics**

While gender was not a focus of my study, there were some components of gender that influenced the children’s interactions with each other, with the space and materials, and with which children I ended up spending the most time with. An example of this is a pattern I found about what children wanted to do when they arrived at the rug, especially when multiple children arrived together. Children typically fell into one of two categories. The first category I labeled “structure-first.” For these children, when they arrived at the rug, their first focus was on getting blocks and starting a structure. When there were already children building structures on the rug and a structure-first child joined, this would manifest as a child asking about the structure, getting blocks from the shelf first, or getting a wooden panel and staking out their own space.
The other category I labeled “narrative-first.” Children in this category began with a narrative or story before getting materials. Rather than asking about what is being built, children might ask what the group is playing. When a group of narrative-first children arrived together at the rug, they began discussing characters, storyline, and who would play which part. After the narrative was decided, then the children would go to the shelves to get supplies. I found that structure-first children tended to be boys, while narrative-first children tended to be girls. Of course, there were exceptions on both sides. When structure-first children and narrative-first children arrived at the rug at the same time, structure-first would start grabbing materials, especially the highly coveted wooden panels and rectangle frame blocks. This meant that by the time the narrative-first children were ready to start building, there were less materials to select from.

One result of this pattern was that boys were often able to have control over the resources. Their structures could be larger and more complex because they had bigger blocks and a variety of materials. Girls were then left with either whatever supplies the boys didn’t want, or they had to engage in negotiation and conflict to acquire the supplies they needed. This could lead to enough frustration for the girls who were building that instead of advocating for supplies, they just left the block play area for another play space in the classroom. While I did not count or measure the average amount of time children spent in the block play area by gender, my guess would be that the average time for girls would be shorter than for boys.

This finding came to light for me when I was exploring the topics of equity and justice in block play as a guest speaker in a graduate level course before I had even completed data collection. Literature on block play has generally supported the notion that time spent in the block play area and future benefit for children’s development are positively correlated (e.g., Hanline et al., 2001). So, with the pattern that boys’ structure-first behaviors might impact the
amount of time girls choose to spend in the block play area, the question of equity of opportunity arises. Block play literature has also strongly supported that block play experiences are positively correlated with children’s participation in STEM related courses and careers (e.g., Wolfgang et al., 2001). There is a push to encourage girls to have more STEM opportunities in childhood and adolescence to have more representation of women in STEM career fields.

Another result of this pattern was the impact it might have had on who I chose to build with. It was much easier for me to join play with children who were focused first on building structures than with children who wanted to figure out the imaginative play scenario. It was hard for me to figure out how to engage with children when they were playing imaginatively because of the dynamics of the way children are used to playing with adults in these types of situations. For example, children would assign me a role and dictate to me what I would be doing, versus allowing more negotiation with other children for deciding on roles. It was also difficult for me to get in the same creative headspace that they were in, even when I tried to be creatively uninhibited. The children all seemed to be able to follow along with the narrative, but I struggled with understanding what was happening enough to participate actively. However, structure building was a more concrete activity, both physically and cognitively. I could contribute to a structure regardless of my knowledge of the narrative. Even when narratives started to play out for structure-first/boys, it was usually very connected to the structure in a thematic sense. It was easier for me to join play, remain engaged in play, and enjoy myself with children who were focused on their structure, which typically were the boys. As discussed in the Pizza House example, I became in-group with a group of kids (Lucas, Logan, Ethan, and Elijah) based on a structure-related game. Had some of the girls told me they wanted to play a game about
characters delivering pizzas, without it actually involving building a structure (and then knocking it down), I’m doubtful that it would have lasted any further than a little while in one day.

Membership Status

The way that children began their time in the block play area was not the only thing that influenced who I chose to play with. During the first few weeks in the classroom there were some children who seemed to warm up to me faster and engage with me more. Hazel and Sofia were two that were very interactive with me. I was very involved with the ramps that Hazel, Sofia, Scarlett, and Greyson were building early on in the year. However, I learned there was a fine line between children seeking me out as a friend and children attaching to a new adult in the room. Sofia and I had been playing a game on the ramps where we would roll a panda down and see if the panda would land on its feet. One of the days Sofia was able to do it a few times, but I had not gotten it to land at all. When I finally got the panda on its feet one time, Sofia had turned away. I called her name to show her what had happened, thinking she would be excited for me—it had not been a competition type game. Instead, she got very frustrated and sad. At first, I did not understand why she would react that way, but then I realized that she was not seeing me as a peer. Sofia was expecting me to behave like a typical adult, wherein I would always let her win and never quite accomplish the goal. Early experiences such as this one made me aware of being cautious about how children were perceiving our interactions. When I noticed that a child was treating me more as an adult playmate than a peer, I made efforts to distance myself. One of the ways I did this was to focus my attention away from that child and participate in a group or build solo.

The Pizza House group, which consisted of Lucas, Logan, Ethan, and Elijah, are children that I individually connected with before becoming part of the group. By the time Pizza House
happened, these were the children I was regularly playing with. Lucas and I became good buddies eventually, but at the beginning of the year his interactions with me were transactional. Lucas behaved differently when teachers told him to do something than when I gave him a directive. Different than my experience with Sofia and the ramps, Lucas was more of a collaborative partner and took my ideas seriously. However, it was not Lucas who initially brought me into building with the group that became the regulars. Ethan was the first to really invite me into play. I enjoyed the friendship I developed with Ethan. The more that I built with Lucas and Ethan, the more Logan warmed up to me as well. Logan and I had inside jokes and times when we would just get the giggles. One day towards the end of the year Lucas, Logan, and I had been playing a game where my character was a witch who was trying to trick Lucas and Logan’s characters into being trapped or poisoned. The narrative of our play was not being led by just Lucas and Logan; I had an equal role in saying what was happening and what would happen next. I invited Elijah to build with me one day and we worked well together. There were times when Elijah asked me to build with him, just us two, even though Lucas, Logan, and Ethan were on the rug.

When deciding who I would build with each day, I did not think about spreading my time equally between children. I wanted to feel like one of the children and children do not consider the proportions of time they spend with their peers; they just want to play with their friends. I wanted to build with my friends, too. However, I do not think that spending more time with a specific group of children caused me to have blinders. The power of the video and audio recordings meant that I could go back and watch interactions between children even when I was not a part of them. For example, Jackson, Mateo, and I never built together as a trio. They often built in one of the corners of the rug, tucked away from other children, so I also often could not
hear what they were discussing while in the classroom. The camera gave me a window into their friendship and interactions that I otherwise would not have been granted access to.

Interactions with teachers around children was also something I carefully considered. I wanted children to perceive me as being on their team, so I did not want them to see me acting like peers or friends with the other adults. At times this was difficult when a child did something hilarious that was not as funny to kids as it was to adults. When big conflicts were happening that required a teacher to support a resolution, I was thoughtful about how much I would share of my observations if children could not or would not share what had happened. I decided that when it involved any type of injury, I would interject or correct information so that the teacher had an accurate understanding. Beyond that, I made an effort not to socialize with the teachers during class time. (This was difficult because they are all lovely people who I enjoyed chatting with).

**Policy Recommendations**

The school that I was at is a well-resourced school. The classroom had extensive collections of wooden unit blocks and supplemental materials, many of which were provided by the lead teacher. Furthermore, the block play area was large compared to other classrooms I have been in, even relatively compared to other areas of this classroom. Many schools and classrooms do not have anywhere near the financial resources or available space. While my opinion is that any amount of wooden unit blocks is better than no wooden unit blocks, this study has underlined the possibilities that are created for children when they have access to enough blocks to bring their ideas to fruition.

Aligned with early childhood policy in general, the main policy implication is that underfunded schools need more financial resources to increase the equity of preschool experiences,
such as substantial block collections, regardless of where in the state or country a child lives. But more than just giving schools more money, an increase in teachers’ knowledge of how to best utilize the wooden unit blocks and materials in their classroom would also improve children’s access and experiences.

When I taught preschool, wooden unit blocks were an option for free play on many days, but not all. Sometimes I even would close the wooden unit blocks for an entire week in order to use the rug space for a large motor activity. I wish that I could go back in time and tell my previous self the importance of daily access to block play in terms of children developing and fortifying skills for joining, building together, and friendships. When there is too long of a break between block play experiences, it is harder for children to carry over structure themes or building routines. I was a teacher who had a love and passion for block play, so teachers who are not such big fans or don’t feel the same magic of blocks might have block play as an even less frequent activity option. Not only are wooden unit blocks expensive, but they require a lot of shelf space and are very tedious to clean up. Managing the transition of clean-up time to the next activity is a challenging time to navigate for teachers. Often, chaos reigns and challenging behaviors emerge. For block play clean-up, teachers either need to plan ahead to start cleaning up the blocks before other areas of the classroom, or involve other children in the process, increasing the quantity of children in the area moving around heavy, wooden items. I can say with certainty there were some days that I chose to not open block play due to what we had going on after morning free choice time. Resources for professional development or the creation of informative resources might help teachers to decide that the benefits of block play for children are greater than the cost of challenges of having block play as an activity.
An important backdrop to advocating for increased financial resources for early childhood classrooms is that major funding legislation at a national level has been unsuccessful. Some states have made early childhood education and childcare a funding priority, but the national level has a higher ceiling for funding capacities. A recent example is the Build Back Better (BBB) legislation. The BBB bill, proposed by President Joe Biden, was a $1.7 trillion package that was mainly focused on social investments, with a strong focus on children and childcare (Smith & Bailie, 2022). The BBB bill never made it to the Senate floor because it faced opposition from even Democratic senators (e.g., Sen. Joe Manchin) citing too large of a price tag that would cause a burden on the national debt. Early childhood education tends to not be categorized as essential when it comes to major budgetary decisions.

On a more local level of policies, schools might have rules or guidance on how teachers should interact with children in the classroom. A common expectation for preschool teachers is that they are engaging with children, scaffolding, and finding teachable moments. These expectations are grounded in Vygotsky’s theories for child development that rely on interpersonal and social learning from a “more knowledgeable elder.” To be transparent in my own pedagogical perspective, I lean more towards the side of teachers being less quick to jump in and help children resolve conflicts or problem solve. But my study supports this perspective about teachers’ involvement with children in the block play area. If a school has the expectation of teacher engagement, teachers are more likely to involve themselves with children in the block play area. Speaking from the experience of being an adult in the block play area, even while really trying to not be a “teacher,” it is so tempting to want to help children with both structural design and conflict.
It is hard to watch children fail when you could fix it for them. However, I encourage school leadership to re-think this policy for the block play area. Sure, there are great teachable moments for children in terms of STEM learning in the block play area. If teachers are sometimes in the block play area guiding play for this type of learning, it could be an opportunity to teach these concepts in a meaningful way. However, I believe that should be the exception, not the rule. In my study I found that some of the most special moments happened when teachers actively gave children space to interact on their own terms. For example, when Hazel and Asher had the great morning of building together after they saw each other at swim class the day before, the teacher and myself both tried to make sure we were not disruptive. The teacher sat along the edge of the rug taking pictures and video, and I scrunched up into a corner. Teachers can also observe things happening in the block play area, such as children noticing that two smaller blocks equal one larger block and bring it to a class meeting rather than stopping play in the moment. Safety in the block play area is a concern for teachers that might mean that teachers are extra-vigilant in supervising the block play area, which is very valid. But supervising safety does not need to mean that the teacher is physically in the block play area. In the block play area, less teacher involvement leads to more opportunities for children’s collective development.

**Limitations**

I was fortunate that I did not have to make any major logistical changes from my research design to how data collection and analysis were actually carried out. However, there were limitations that impacted the original planning of the design. The two major limits were time and money. As an un-funded doctoral student, I could not commit to being in the classroom every day or for full days. Although I do think that I achieved saturation in my findings, I wonder what might have been if I had been in the classroom for more time. It also would have been nice to be
able to observe children and their interactions outside of the block play area to add a layer of context to their behavior inside of the block play area. Another thing that was limited by financial resources was my audio recording options. I could not afford expensive lavalier microphones to clip onto the children or me. I only had one audio recording device, in addition to the GoPro sound. I tried different spots, but it was difficult to find a location that would pick up clear audio. Since children wore masks all year, they’re already challenging-to-hear voices were even more muffled. The GoPro did pick up audio pretty well, but there were moments when children were quietly conferring or having a disagreement that I would have liked to hear with more clarity.

There were some limitations that occurred due to the COVID-19 pandemic. First, I was very limited in school choice. Almost all of the schools and teachers that I contacted told me that they were not allowing extra adults in the building. I would have liked to have more consideration about the population of families and children at the school. Although I absolutely loved the school I ended up at, and the administrative staff and teachers were incredible, the school skews strongly in terms of family income. Second, children having to wear masks was also a limitation. I do think that children can read facial expressions, despite the masks, it would have added more context for me to be able to see facial expressions of children that I was directly interacting with. There were a few times that I saw two children talking loudly to each other and I was not sure if it was an angry conflict or just excitement or playing. Third, I was not able to really meet the parents of the children in the class. There were a few parents who volunteered in the classroom that I was able to meet and talk with briefly. There was also a family event towards the end of the year where parents came to school for an hour or two to see their child’s portfolio. I was able to meet a few more parents there, but it was not conducive to
having in-depth conversations. During that event I did learn about how much my “regulars” were talking about block play back at home. It would have been great to have that information throughout the year. Parents were not permitted to come into the building to drop their children off in the classroom.

**Future Directions**

There were some themes that emerged from the data, in addition to the findings I have shared so far, that would be fascinating to explore more in depth. One was children’s use of weapons, or “protection” strategies, in their narrative play. Gun play in classrooms has been a hot topic with the increases of mass shootings and national discussions about gun laws. Is gun play in classrooms detrimental to children’s development, particularly in terms of their priming events setting the foundation for future patterns of interactions? What was emerging from my data was that using the term “gun” or pretending that they specifically were holding a gun was pretty rare. There was plenty of shooting, but the shooting devices were lasers, “pew-pews,” or cannons. Children pretended to have TNT, ninja fighting powers, throwing stars, bombs, launchers, meteors, blasters, fire power, poison, and arrows. The main ways that children responded to the threat of attack were to build a moat around a structure, dungeons to trap bad guys, invisible protection domes, and various other ways that seem more based in fantasy and fairy tales than reality. All of this to say, I think that understanding or making policies around gun play could be better informed by seeing from the children’s perspectives the meaning they are making of weapon play. I believe that the block play area would be a prime location for such a study because wooden unit blocks can be turned into anything a child wants and social interactions are highly concentrated.
Another future direction could be exploring how studying peer culture in the block play area might help to support or inform some of the fields of study already linked to block play research. As someone who worked for an early mathematics research team, I know that wooden unit blocks are highly valued in the STEM world for their ability to help children learn a variety of foundational skills, such as spatial reasoning. A large percentage of empirical studies and literature about block play are coming from a STEM perspective. My study was not geared around learning about children’s individual development. However, I am curious about what can be learned about the STEM value of block play from a cultural lens. While researchers have clearly demonstrated that there is a correlation between block play and STEM related skills and development, there are many gaps to fill in regarding the “why” and “how.” STEM researchers tend to be more quantitatively minded, but I think ethnographic methodology could help to see parts of block play that are not illuminated through statistically significant outcomes.

Some of the footage that did not get analyzed was of clean up time, or as they referred to it in my class, organizing. I did not always record organizing time, sometimes for logistical reasons and sometimes for technological reasons. I determined that it was outside the scope of this study because oftentimes children from other play areas were pulled into the block play area to assist with organizing. Due to the quantity of blocks and materials, organizing the block play area was a complex task. I was endlessly frustrated by organizing time; sometimes it felt like the wild, wild west. Children were regularly finding ways to avoid organizing, the energy and noise level would rise, there were often meltdowns, and some children exhibited defiant behaviors that felt out-of-character to me. However, for exactly the reasons that it was my least favorite part of observation sessions, I think it would be an interesting topic in a future study. Corsaro has discussed the peer culture of the clean-up times of the day, such as strategies children use to
avoid cleaning up. Nevertheless, for the same reason I think a focus on the block area adds to knowledge of peer culture in general, I think observing the organizing process would provide new insights as well.

Finally, I hope that participant observation is a method of data collection that researchers utilize more frequently in empirical studies with children. The technological developments in digital recording devices are such that cameras can be placed unobtrusively, and the equipment is very portable. Having digital recordings is helpful in reducing the limitation of wanting to get rich field notes while still being engaged and in the moment with children. Learning the techniques of participant observation are certainly faster and more budget friendly than learning to use some of the technological devices for observing and collecting data on children in a lab setting. Participant observation can add to the knowledge of child development that can only be captured and understood from inside children’s perspectives and worlds.

**Final Thoughts: “Well, The Bottom Line Is…What Should We Build?”**

Through this study, I uncovered the processes and routines of children manipulating both their socially constructed and physical environments. My findings can contribute to the literature on block play and Corsaro’s work on peer culture. Readers can take away an understanding of how, on their own terms, children collectively develop friendship, relationships, and group dynamics that pushes beyond the individualistic focus of much of the block play literature. Block structures were not just the activity that children were doing, they were a central part of their cultural routines. Block structures are literally produced and re-produced through the collective processes of children’s interactions with their peers and the blocks. Each day, blocks were selected from the shelves, stacked into structures, negotiated, reconfigured, knocked over, re-built, and cleaned up. Children do not determine when block play starts and ends or what
materials are available. But they create ways of doing things and develop shared meanings collectively that allow them to navigate the central challenge of having control of their play, while still socially sharing with their peers.
APPENDIX A

BLOCKS AND MATERIALS
BLOCK PLAY AREA

NORTH

WEST

SOUTH

EAST

NW

NE

SE

SW

Frame Blocks

Big Cubes

Rainbow Blocks
157

XL Unit Blocks

Wooden Panels
REFERENCE LIST


VITA

Dr. Missi Jacobson was raised in Buffalo Grove, Illinois. Dr. Jacobson’s collegiate journey started by earning her Bachelor of Science in Human Development and Family Studies at University of Illinois Urbana-Champaign. Upon completion of her bachelor’s degree, Dr. Jacobson attended Washington University St. Louis and received her master’s degree in social work. Following graduation, Dr. Jacobson taught preschool for four years, before deciding to return to the academia world to earn her PhD in Child Development from Loyola University Chicago and Erikson Institute.

During Dr. Jacobson’s time in her PhD program, she worked on many research teams with focus areas of early mathematics, pediatric physician professional development, home visitor professional development, technology in early childhood, teacher professional development, and children’s attention/focus in school. Additionally, she worked for Erikson Institute’s Academic Success Center as a tutor, group study facilitator, program evaluator, and resident APA formatting expert/enthusiast.

Dr. Jacobson began her inquiry about block play in preschool classrooms as a doctoral student, completing coursework and an independent study through observing block play in a preschool setting. Dr. Jacobson was also inspired and encouraged by her block-play mentor, Dr. Mary Hynes-Berry, who deserves a lot of credit for nurturing Dr. Jacobson’s love of block play into an actual dissertation topic. Dr. Jacobson looks forward to finding opportunities to continue her interest and study of both block play and peer culture in her professional career.