Perceiving architecture: A experiential design approach

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Perceiving Architecture: An Experiential Design Approach

by

Ashley Verbanic

A thesis submitted in partial fulfilment of the requirements for a degree of Master of Architecture
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Date of Approval: April 12, 2010

Keywords: Preschool, Behavioral, Children, Playground, Process

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DEDICATION

This thesis is dedicated to my parents, Marisa, and Shawn, all of whom gave me the support and encouragement that made this possible.
Thank you to everyone who has been there for me during this process and throughout my architectural education.

To my thesis chair, Steve Cooke, thank you for your guidance and inspiration.

To Alex Bothos, Stanley Russell, Patricia Ramos, and Chaddy Hanwisai, for all of the direction and encouragement.

To my family for their unconditional love, support, and understanding throughout my education.

To my classmates for all of the conversation, critiques, and memories throughout the years.
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Investigations into learning environments, educational theories, and sensorial design strategies become tools from which to explore a design methodology. The project itself seeks to understand a process necessary for a meaningful, humanistic design approach for an architecture that benefits and enriches the everyday lives of individuals.

PERCEIVING ARCHITECTURE: AN EXPERIENTIAL DESIGN APPROACH

Ashley Verbanic

Abstract

Perception of the physical environment is largely dependent on a range of criteria which are not always readily identifiable. Such a difficulty to identify how a person perceives an environment creates a situation in which architects and designers can easily neglect this idea of the individual user and their experience.

Through the design of a preschool, this thesis focuses largely on understanding how children and other users perceive and interact with their environments. The design process employed synthesizes user based research and analysis of environmental cues such as light, sound, and smells and their effect how we interpret a setting.
This thesis is largely an investigation in a humanist approach to architectural design. The design project, a preschool, exists primarily as a tool for the exploration of such an approach, which can be applied towards any design for inhabitation.

Throughout the thesis, there are two major research areas: user informed design and an environmental, sensorial approach.

This project lies in the synthesis of these two; they cannot be separated.

Fig. 1. Aldo Van Eyck Sandboxes
INTRODUCTION

A person’s perception and understanding of a space is largely dependent on an individual’s cultural and social backgrounds as well as their current dispositions and emotions. Such a wide range of seemingly unidentifiable perceptions can be difficult for architects to understand and is therefore often neglected in design. Such a disregard for the inherent relationship between an individual’s experience and the environment has led to an increasing number of architects who create buildings as objects to be visually understood rather than corporeally experienced by a person or community.

Often, buildings of this type do little to enhance the user’s experience and, as some theorists claim, threaten to alienate us from our relationship with the physical world.1 For designers, understanding a visitor’s experience is reliant on two major factors: how well they understand a certain user and how the physical environmental qualities, such as sensory stimuli, will affect that experience.

While many designers and theorists separate the idea of user research and phenomenological stimuli, it is important for architects to understand the connection between these two design concentrations.

Architectural studies within the social sciences, or behavior research, focus primarily on understanding who the users will be and how they might interact, use, or even understand the characteristics of a space. Through observation and research, designers can begin to understand what is going on psychologically and socially within a certain setting.

At the point when designers begin to grasp who they are designing for, they can begin to set a series of goals based on the user. Creating a physical entity that informs and benefits certain sentiments and emotional connections with the environment requires knowledge of specific design qualities such as light, sensorial conditions, temperatures, and even the effects of time.

Bringing together these environmental and user based design goals to work cohesively with each other creates a design process that focuses on the individual.
Such an approach secures the creation of meaningful, humane architecture that benefits the individual in their daily life.

This thesis focuses on a synthesis of these two major approaches with the design of a Montessori preschool. It investigates how children perceive an environment as well as how environmental cues such as scale, light, and other sensorial qualities effect how we interpret and remember a setting. Focusing on how children, parents, and teachers interact with the environment allows us not only to create meaningful places, but also allows us to understand how the environment itself can influence actions and emotions within a space.

This type of design requires exploration into the target user, sensorial conditions, as well as the design approach and process taken by a designer. In this thesis, the design of the school starts from small scale ideas about individual moments or interactions within the space.

Reinstating such an approach to design, which understands the person-environment relationship is important for the architectural world and everyday experience of people in general. While approaches and consideration of architecture that deals heavily with the senses is often considered for sacred and momentous spaces, this thesis explores how it can be considered in design for everyday spaces in such a way as to enrich the lives of individuals.

Notes:

CHILDHOOD EXPERIENCE

Experience of the Child

As research has shown, children use their physical environments for educational play in order to develop spatial understandings, motor skills, as well as social and cultural situations which can arise in these settings.¹ These spaces become important for formal education, social education, and the child’s sense ‘situated-ness’ and understanding of the world around him. A particular space, its qualities, and the activities it provides for, can either contribute to or inhibit certain interactions and learning situations.

Children need to be able to actively explore environments, both those familiar and unfamiliar to them, in order to develop the spatial and sensorial understandings that will inform their experience of the world throughout their lives. Infants and toddlers, for instance, develop their sense of orientation through their exploration and physical

Fig. 2. Found Playgrounds in the City²
engagement of things. Older children use hands-on environments to realize and correct their mistakes in order to learn about physical, social, and abstract concepts. Even teenage youth may be impacted by settings which either inhibit or engage their development of social communication skills and sense of self. ³

Although this thesis explores primarily the experiences of children, it is important to understand how all users interact with the space. Teachers, parents, and after-school children all become important users who must be accounted for. Through both formulated research and directed observations, we can begin to understand how the physical environment impacts children and other users.

By having these understandings of children and users in an environment, designers can begin to understand some of the implications and possibilities for certain spontaneous activities. This is important because architects and designers can never understand each individual perception, and moods and activities can change based upon more than environmental factors. The difficulty for designers to understand the ideas of perception are, here, viewed as opportunities, which give clues to the design of looser and tighter spaces for spontaneous interactions that they designer himself may not for-see.
Education and the Environment

School design research has shown that sensorial stimuli in learning environments can have drastic impacts on a student’s performance. Enriching environments have accelerated development, while environments lacking adequate sensorial stimuli have been shown to cause learning defects. Schools lacking such stimuli as adequate lighting, access to natural air, temperature changes and differing smells or sounds have shown improvement in student performance when such problems are fixed. 4

In the work of Richard Neutra, the subtle relationship between the architectural environment and man’s behavior and performance is often brought up, particularly in reference to school design. 5 This environmental relationship is true both in the design of actual school settings as well as informal learning environments.

In fact, many educational theorists, such as Piaget, Montessori, and Reggio Emilia reinforce the importance of environmental effects on learning and the experience of childhood. 6 Across these educational theories, there is an emphasis on the importance of hands on, environment based learning, both in regards to large scale environmental qualities as well as direct applications to learning curriculum.

The Montessori Method, for example, highlights the use of ‘free-play’ in which the child directs his own learning experience. This shift from instructional learning to self guided learning immediately requires a higher level of child/environment interaction. The environmental and physical objects are then able to become the curriculum that children can explore at their own will. Students play with ‘sensory objects’ as they are called, which provide them with instruction on their errors, allowing them to correct themselves in order to teach themselves more abstract concepts. This trial and error approach allows for direct physical relationship, making abstract ‘knowledge’ into a concrete, applicable action. 7

This approach to learning, which is similar to the learning that goes on during everyday childhood play, has direct implications on both the small and large scale environmental requirements. In these settings, as with playgrounds and other child locales, children are encouraged to engage in direct touch with objects. For example, understanding what a texture or surface material conveys may have important implications for the way a child interacts with it.

At the larger scale, the idea a space informing action, and thus shaping the experience, also has
implications for the spatial organizations. In both Montessori and Reggio Emilia classrooms there is a clear definition of different zones within the room. These may be zones for different areas of knowledge to be explored, or may be based on what type of environment may be conducive to certain activities. For example, children in these ‘free-play’ environments often work alone or in small groups. Herman Hertzberger identifies this as a major driver for the organization and formal development of the spaces for many of these classroom designs. He tells us that the setting must:

“...contain the greatest number of places screened from one another in such a way that everyone can stay focused on their work, but at the same time offers a sufficiently clear view of others as to arouse each other’s curiosity and give each other ideas and encouragement." \(^8\)

Here, the environment is able to shape the experience and actions of the user. Sensitivity of how to provide this, through correct changes in wall heights and levels can begin to shape the space for the child while still paying attention to how the adults, in this case teachers and parents, may experience the space as well.

Reggio Emilia also reinforce the importance of...
community involvement as a learning tool. Parents and community members are encouraged to take place in both everyday activities and school meetings and children are encouraged to interact with community events. By viewing these interactions with the larger social contexts as learning opportunities for children, the Reggio Emilia schools are conducive to children observing activities outside of the school. Typically, they are organized around central piazzas and have open views from inside of the building to the community.10

Previously, parks and playgrounds have provided children with this connection to their community as well as free open exploratory play; however, economic restructuring has contributed to a loss of public spaces in which children can actively participate. Parks and Playgrounds are lost in favor of pseudo-public developments where children’s needs are often forgotten. This trend, along with safety concerns and increased electronic media have driven children off of the streets and into private settings. 11 Alienation from such a public realm has left children without culturally or emotionally engaging environments.

Spaces for truly interactive, hands on learning are lacking in children’s everyday environments. Social situations and active explorations, which would have taken place in these settings, have taken a backseat to the familiar indoor activities which often lack developmental instruction and connection to the physical self’s experience of a space.

What playgrounds we do find invested in communities become the only public centers for children in which their scale and perspectives are accounted for. While these usually do acknowledge the differences in children’s physical movements they often lack sensitivity to the thought process, educational, and other sensorial qualities that make a space successful for child interaction and play.

By thinking of the school setting within the context of the larger city, experience of both the school and related public spaces can be enriched. The interactions between these spaces can provide open learning areas for interaction between children of the immediate community who attend the school, children visiting the city from further away, and within the community as a whole.
Notes:


3. Tuan (1977) p 19-33


   The Reggio Emilia Approach - The pre-school Childs languages of learning.


8. Ibid. p 83

9. Ibid. p 97

10. The Reggio Emilia Approach - The pre-school Childs languages of learning.

EXPERIENCING ARCHITECTURE

Sensorial Experiences

While the importance of a sensory rich environment is obvious to most, in contemporary designs, attention to the senses is usually limited to sacred spaces. While they play just as important a role in everyday spaces, they are often left out of design considerations. Touch, smell, and other sensations are key in what we call experience. They are the receptors with which we move through and understand space.

These sensory signals have a large impact on our relationship and experience of an environment because they are able to physically and emotionally engage and connect us to the architecture. Although these types of sensorial qualities may not make or break the successfulness of an architecture, they must remain of high importance because of their ability to reinforce an individual’s personal connection to a place.

Juhani Pallasmaa, claims that our design culture has forgotten the importance of the senses in engaging our whole being- physical and emotional- in an architectural experience. This theory speaks to an experience that goes beyond a visual relationship between a person and architecture. In the architectural realm these non-visual experiences become important in how our space is perceived, how it makes people feel and even perform. The scale of architecture in relation to the person, the sensation a hand feels while touching a handrail, or the sound a person makes on the building as they walk: all of these qualities are sensorial pieces that make up a user’s impression of the place.

Traditionally, there are five senses that make up our experience with the world: Sight, touch, hearing, taste, and smell. However, in the work of J.J. Gibson, he introduces us to the concept of a “basic-orienting system”, related to the idea of the kinesthetic. How a body moves through and understands space in relation to up, down, forward, size, and movement. He also groups the taste and smell senses together into an olfactory system.
Each stimulus relates to a particular sensorial receptor in the human body and blends together there to create a holistic experience. Some of these senses remain invisible to us, not noticed until something unpleasant enters the picture, such as a loud noise that breaks our concentration. Others become noticeable only when we take a moment to pay attention, such as the background noise of a running fountain. However; whether we notice these sensory cues or not, they all contribute to the feeling of the space or mood of the user.

While some architectural spaces may neglect the implications of the sensorial qualities of a space, some people will always notice certain qualities that others will overlook. Different individuals may be responsive to certain sounds or smells that may affect their experience.

Designing for children, for example, calls for a particularly sensitivity to nearly all sensorial qualities, as they often pay the most attention to details which adults have grown to ignore. These environmental qualities will not be neglected by children, who often delight at the sound of their voices in a hallway which echoes, touch differing textures of material on the ground, and may even taste things that they find in a space.

Here, small scale interaction with materials, textures, and even shadows become major components of a space. Children’s close attention to these types of design factors can influence how their interactions with a space through their use, moods, memories, and social interactions.
Experience and Perception

“Between the Inhabitant and his dwelling there is a dialogue...” -Maurice Sauzet

Qualities such as sensorial factors will always influence how a person experiences a space. Unfortunately, the qualities that create these types of feelings or personal connections with a space are usually, if not left out entirely, put off until the end of a design process. As Pallasmaa has claimed, our cultures obsession with the visual qualities has left other factors of the environment as secondary thoughts. While this may be why architects fail to realize the full potential of an experience, there may be other reasons for which these issues are forgotten from the design process. Architects may also fail to understand an individual’s personal experience with a space because of the complexity with which a user’s experience is determined, which will usually not be able to be identified clearly, if at all.

In any given setting, the experience that an individual has will probably be different than that of other users. Memory, cultural teachings, and age differences can change the perception that a person has of a space or object. These differing perceptions present an interesting challenge for understanding how to design for different user groups. Cultural influences, for example, may present negative connotations for certain factors which have positive implications for other individuals.

While designers may not be able to identify each reaction and may not be able to fully grasp all of the implications of a person’s experience of space, it is important for them to pay close attention to who major user groups so that they may begin to understand the most important implications of their choices.

When individuals bring in set connotations that affect their opinions or feelings about spaces, architectural elements create a level of spontaneity in which the user brings his or her perceptions of use. Children, for example, without heavy cultural influences and similar experiences in scale, may perceive a seat for an adult as an object to be climbed or as a boundary between spaces.

When planning for different user groups such as children and adults who may perceive and use spaces differently, designers must begin to realize the impacts and implications of each small scale design decision while still keeping in mind that there are possibilities which they will not foresee. These spontaneous activities of people bring a second and almost more important level of experiential,
sensorial happening to a space.

As a designer, close attention to how the qualities of a space lend themselves to interactions, between people and the architectural space, can begin to provide positive experiences in rich emotionally engaging spaces as the person moves through an architecture. For designers this may mean a close interest in the interior spaces of the building before thought to the formal aspects of external building are considered.

Alvar Alto, who often considered the engagement of sensorial qualities in his designs, talks about an architecture that begins with an ‘emotional atmosphere’ of different spaces and grows from the inside out rather than a process that focuses on one broad design concept or form. This attitude toward the design process means close attention to environmental cues, people within the space and what a space should communicate to the user, whether this be in terms of activities, interactions, or corporeal impacts on a user.

For example, designing for children implies the importance of understanding how children interact with an environment and how that setting conveys what we want to them. If the designer is attuned to the people, rather than the formal aspects, he can understand the implications of his design decisions to provide opportunities for certain uses or interactions whether they be spontaneous or planned.

It is these types of influences which must be remembered when thinking about how sensorial and environmental factors create an experience.
Sensory Cues

There are some basic environmental conditions that an architect can begin to identify in relation to their design implications. Understanding their basic functions and how certain user groups will generally perceive or interact with them is crucial to understanding how they will effect the experience and dialog between the person and the architecture.

The classic five senses, along with issues such as scale and light all inform what a space conveys to the individual, and thus how that space begins to impact the mood of that individual. It is important for the designer to remember, however, that while each of these stimuli has merit by itself for discussion, they interact and work with each other to create a collective experience of a space. While we can pin point each element, they will never be experienced alone.

Vision for instance, is arguably the strongest of the sensory cues and has long been a major consideration for designers. It is also the most closely related to learning and thus most easily processed by our brains. But what makes vision such a powerful stimulus is its relationship to this collective experience involving all the environmental stimuli. As we develop memories of certain senses over time we are able to look at an object and understand it in terms of its feel, smell, or even taste based on what we have experienced before.

It is this ability to reinforce and communicate other stimuli that may explain why adults pay little attention to things such as touch and sounds, while children seem to...
be touching everything. They are using their environments to develop their ability to respond to visual connotations.

In fact, environments where children can touch and explore tactile qualities are an important factor to the learning process, particularly for children under the age of three years old. Children’s playgrounds are usually full of textures: sandboxes, water play areas, rough and smooth surfaces. However, consideration is usually neglected outside of designated play areas.  

Textures of materials and surfaces are the user’s only direct physical contact with a space. For adults, these experiences are usually contained to the spots specifically meant for contact, either through sitting or touch of the hand. We can easily account and plan for how a handrail or door handle feels on contact with the hand. However, when designing for children, every material at their reach is usually touched as they develop an understanding of what something feels like. Their close proximity to the ground also changes what we ordinarily think of as surfaces for touch. Therefore, ground and lower wall surfaces become important considerations for design in spaces inhabited by children.

From the scale of a child, not only does the range of touchable objects change, the entire sense of the room is different. The visual experience from the child’s
perspective changes not only the size perception of the room but also the focus of their gaze. (Figure 5 and 6) Many of us have often experienced this difference when returning to a favorite childhood space and finding that now, as an adult, it appears much smaller than we can remember it being. Similarly, children will often feel that spaces are larger than typically perceived by adults and they will often play or sit in smaller spaces not traditionally meant for inhabitation, such as under a desk.

The scale of an object such as a desk may change the perception of use as well. Here the desk, which adults may only use the top of, becomes a place for hiding or playing while a seat may become a climbable object for play as well.

While issues such as scale, materiality, and vision may be easily considered by a designer, sensorial cues such as smell and sound also influence the perception and holistic experience of a space. A person’s sense of smell, for example, is closely related to an individual’s memory, particularly long term memories. These smells have the ability to tie people to the memory of a favorite childhood place or transform an everyday space into one that has a clear identity related not only to its smell but to an individual’s past experiences. Emotions or events which had been entirely removed from our memory can return to

Fig. 8. Perspective and scale (child)

Fig. 9. Perspective and Scale (adult)
Recent studies into olfactory effects on task performance by Robert Baron and Jill Thomley found that the smells of a space could also increase the performance and moods of the individual. 12

While the smell of a space is usually left out of the design process, an architect’s material choices and placement of certain elements, such as flowers creates a ‘smell-scape’ for the user. This can mark a transition into a space or create a sense of journey an exploration through a path. This is usually experienced on an active street, particularly in cities, where a walk consists of the changing and blending of smells.

There are two basic types of smells for consideration in the design of a setting: sourced based smells, those which are immediate such as the scent of blooming flowers, and ambient smells, those which relate to the general long term atmosphere of a place. Both of these types work together to create a sense of place and character that can help users more readily identify a place.

For children, smells become an important factor in development of understanding of their surroundings. In many pre-school and educational games, children are presented with different objects and asked to identify what the object is based only on its smell. By allowing spaces
for children to garden and cook, development of olfactory identifications can be developed at the same time that they learn everyday skills. This also helps children to foster an appreciation and ownership for their environments and the natural world. This is important, particularly for children in the city who often lack a range of spaces in which to interact with natural elements.

Sounds are also cues with which a child can explore their natural and man-made environments. Although we normally do not pay much attention to sounds until they become either annoying or pleasant, there are a wide range of tones within a space that contribute to the overall feeling.

The tone of a space has the ability to change its character as well as give us clues as to its size and the person's position in it, such as the reverberation we find in a cathedral. In the cathedral or sacred space, the auditory character tells us not only that the space is large but also that this is a place for quiet reflection as the noises we make seem amplified. Similarly, in spaces with reverberation that are less sacred, children can experiment with the auditory effects that they have on the space by creating sounds that will be echoed back to them.

Sounds produced by movement through a space create another cause and effect reaction with the environment, thus generating a learning experience in itself. In the case of a child developing basic motor skills, different ground textures such as pebbles can reinforce, through sounds, the kinesthetic experience of the child. Ground surfaces that react to the child's movement with sound encourage motor skill activities such as stomping, shuffling, running.

Sounds can also be an indicator of transition from one space to another. The stark contrast from a loud space can make a semi-quiet space seem nearly silent. The experience of the sound-scape found in a typical Indian street, for example, can seem overwhelmingly loud and busy for some. However, movement into more private spaces removed from the main street seem silent and
calming in comparison. Conversely, the transition back to the bustling noise of the street gives it an identity that clearly tells the person where they are.

These contrasts in auditory environments are also important in the design of spaces for children. While designated play spaces are usually somewhat noisy, many educational institutions outline the importance of having areas that are quiet and give the sense of reprieve and protection for when a child is feeling overwhelmed, scared, or just tired.

Sounds, as we have seen in regards to spaces for children, can become both play spaces, such as paths and follies for exploration, as well as environmental conditions which convey a certain sense of activity or use.

It is environmental qualities such as these which have a direct relationship with the user’s experience of a space both emotionally and functionally.

Designs sensitive to scale and sensorial cues can reinforce an individual’s connection with a space through the enrichment of everyday spaces. They can also be applied directly to the design of learning spaces for children. This can be in the form of direct applications which enhance or promote learning experiences and can also be through attention to general guidelines for adequate learning spaces for students.
For the designer concerned with experience, small scale issues such as these can be the means with which design begins. Concern with the sound of the ground as a child walks through a space, the texture and material that a child is encouraged to touch, or even the social situations that certain environmental qualities can provide become major concerns when using this humanistic approach to design.
Notes:

1. Pallasmaa (2005)


8. Ibid. p 60, 67.


DESIGN PROCESS AND TOOLS

Exploring and understanding how an individual experiences an environment requires consideration of how to approach the design as well as what design tools become important. To become sympathetic to how someone perceives the space one must develop design tools that fit the situation and user that they are trying to understand.

For this thesis, the process began with understanding children. Their activities, social situations, and their feelings became important design drivers to which all physical aspects of the project needed to contribute to. Only when there was a close understanding of the user can a designer begin to understand how the sensorial and environmental factors begin to reinforce or influence the goals previously derived from the research of the user.

The design process began with ideas about moments of interaction that happen within the environment. These moments are closely related and resultant of goals and activities from research into children and schools.

From here, four major program spaces are developed. While these spaces are primarily designed independently, they are brought together and begin to influence and inform each other, creating a very non linear disordered design process.

When designing for children, an important design tool for development was evolutionary perspectives. Rather than beginning from a more ridged tool, for example, the floor plan, the perspective and sections were primarily used to explore more loosely the ideas inherent in a certain experience.

The perspective was particularly important because it allowed the design to be seen from the eye level of the child, which can drastically change the visual understandings of a space.

This search into process and approach created a much less ordered design process in which everything begins to influence each other, but from which the person is always the most considered factor.
The Fuji Kindergarten, by Tezuka Architects, was founded on a specific set of childhood educational ideals taken from the Montessori Method. The founders see open, exploratory experiences for children as their main teaching method. The large central courtyard encourages children to explore their surroundings while the elimination of the teacher hierarchy allows the environment and social interactions between children to become the teacher. Sliding panels, which are usually left open, allow children to use the courtyard freely, becoming a communal classroom for all. Within the building, the classrooms themselves are kept open by using re-arrangeable furniture that can be moved based on programmatic needs.

While the courtyard and interior spaces serve as classrooms, the rooftop provides children with a playground. Here they are encouraged to run, climb, and look down into classrooms below. Rope ladders,
attached to raised skylights, encourage children to climb and observe activities from different vantage points. The rooftop also provides children with a unique vantage point over the city, from which the first floor is removed.

The scale and perspective of the child is considered throughout the design. Ceiling heights are kept low and to the scale of the child and classrooms provide zones for small scale interactions and more intimate spaces when compared to the large courtyard for group activities.

This is carried through even in the small details of the project, where the interaction of the child is considered in terms of materiality, sizing, and form. Handrails along the roof provide space for children to sit and observe activities in the central courtyard. This seating provides yet another unique vantage point for observation by the child.
- Movement along rooftop.
- Open areas for large and small scale interactions.
- Areas for different observation points.
- Changes in views out to city as child moves through.
- Non-hierarchy classroom expressed in architecture.
- Exploration of natural model in outdoor courtyard.

Fig. 20. Fuji Kindergarten analysis
CASE STUDY: MARITIME YOUTH HOUSE

The maritime youth house, designed by BIG Architects, serves the local youth chapter of the sailing club. The interior program is small and separated into two building functions. One building supports the functional workrooms and storage of the sail club, while the second building provides a multi-functional room used by the community and sail association for special events. These two buildings work together to provide a level of enclosure for the outdoor ‘playground’. This exterior, undulating surface provides more than an exterior plaza for these buildings by becoming one of the primary programmatic spaces.

The outdoor surface covers the entire site in response to problems with pollution. This creates an area that is always open to the children of the neighboring homes and housing complexes. Its open orientation along the water’s edge connects to a beach park development which runs adjacent to a fairly large neighborhood.
complex, allowing it to become a playground for the neighborhood children as well as a community icon.

The surfaces undulating slopes create a playground for children without the use of classical play objects. Here, children are encouraged to climb in order to reveal the water’s edge. The vertical changes in the surface provide differing zones and look out points from which children can observe. These zones also function to allow for a variety of age groups to inhabit the surface at the same time. Younger children use the space for climbing, sliding, and exploration while older groups are provided with a skate park and space for sports games.

These undulating surfaces, which also solve the problem of a small area for both boat storage and play areas, provide differing and changing perspectives for the child to experience space as they move through the project, turning it into a path of sorts in which children are encouraged to explore.
Fig. 26. Maritime Youth House analysis
CASE STUDY: LAVEZZORIO COMMUNITY CENTER

The Lavezzorio Community Center provides support for foster families and helps in reuniting foster children from the neighboring SOS community. Although this makes up a large portion of the program, the building is focused on staying open to the entire community.

The building remains open to the north and south, visually connecting it to both the neighboring SOS children’s center village that it supports as well as the Auburn Green neighborhood to the north.

The program includes services for the foster center, daycare facilities and a large community room which is open to anyone from the neighboring residences. The daycare portion of the program allows for an open outdoor space that faces the SOS community. The layout of the building allows this area to face away from the busy street edge and to be contained on three of the sides by building, making outdoor access safe and more available.

The buildings sectional qualities provide
connections both within the building and to the neighboring context. As children move through the hallways, they are provided with differing vantage points from which they can observe others activities. While visually changing the perspective, and thus the spatial experience of the building, children are provided with views to the busy street edge as well as back to their houses to the south.

This also provides unique spaces for viewing down to the main stairway play space. Here children can observe other children interacting with each other, climbing, or playing.

This main stairway play space, which is located in the entrance room provides for children and the larger community as well. It is seen as a stage area where child interaction becomes important at many scales. Children can perform for other children in a group interaction or they can form smaller, more intimate scaled social settings along the steps.
Fig. 32. Interior Stair as Play-space

- Stairway as social zone.
- Large and smaller scales of interaction.
- Climbing, seating, play area.
- Delineation of different zones.
- Relationship to child scale.
- Child interaction or observation.
SITE ALTERNATIVE A

The Neighborhood

One site worth consideration is that in a neighborhood setting. Neighborhoods generally provide a sense of community and, if they function properly can provide a level safety for the children living there. However, a child park within a neighborhood may tend to serve only children from the area, where children are already are usually already provided for in terms of open exploratory play space when compared to larger or urban communities.

Seminole Heights

The site chosen is located in the Seminole Heights neighborhood in a patch of land that is currently part of Ola and Henry Park. Located off of the major streets Hillsborough and Florida, the area is primarily residential.
with medium to heavy density. The existing park currently functions as a community resource for recreational sports activities but provides little more than a plastic play set for non-sports activities and younger children.

While the Seminole Heights neighborhood provides relatively walkable streets for residents, its public functions are limited. The main spine of commercial use, which runs alongside the community, provides little to no resources for children and families. The neighborhood’s major community resources center on Ola and Henry Park and a garden center which is located a few blocks away.

The site option is located on the west end of the recreational park, whose existing resources include areas for baseball, basketball, and soccer. The park also has a small play area for younger children and a public rest room for visitors.

The actual site for building consideration is currently a grassy field well shaded by large trees. Running through the site is a canal for overflow from the Hillsborough River. This canal, along with the varying topography, provides a unique area for possible development of an exploratory area. However, the site’s situation in such a residential area does little to provide for those outside of the neighborhood.
The Park

A second site option is the park setting. With similar attributes to the neighborhood, the park provides a relatively safe setting for children of all ages to explore by themselves. While public parks can vary drastically in character based on their locations, the ones in question here are situated in mixed use, mostly residential settings. In this setting there is usually a sense of community reinforced by the parks existence as a main resource. While the community can remain highly involved in the area, the successful park also becomes available to people outside of the community by becoming a destination.

Desoto Park

The park chosen for consideration is Desoto Park in the Palmetto Beach community of Tampa. Located
south of Ybor, the neighborhood is rather segregated from the larger community resources; however, residents have made sure they provide their own. The considered park is the neighborhood’s major resource for community meetings, children’s and recreational activities. Because of its community involvement and connection to the neighboring school, the park can be used by children with relatively low supervision.

With a highly residential land use the park is used often by children. It offers a small playground, skate park, community pool, and a small after school program. The park itself is broken down into many differing public functions and zones throughout the park.

The parks location along the bay provides views both to the downtown area as well as to Tampa’s industrial uses along the bay. These give a clear sense of place and identity to the park and clues to its situation within the larger urban context. Its situation on the bay also provides clear connection to the water and the bay’s breezes which carry in differing smells and temperatures of wind, which could have possible design implications for the child center as well as the playground.

In a setting such as this, with high residential uses and quiet, community based streets the child learning center and park have the ability to become more integrated
into each other, allowing the interior spaces of the center to become an extension of the playground.

The parks disconnection from other uses, however, creates a situation in which the user is clearly defined. The project here becomes a playground in which a range of user groups is possibly left out. Not only does this inhibit exploration of different users in a space, but also dictates that children will not be as exposed to spontaneous community and cultural activities that would be prevalent in an urban setting.

Fig. 41. Desoto Park site relationships

Fig. 42. Desoto Park site sketches
The City

The urban core presents many opportunities for rich interaction between children of different backgrounds as well as within the community. Cities themselves are full of sensorial stimuli as well as exciting opportunities for children.

Currently, less developed cities, such as Tampa, have lost much of their residential base and are working on attracting people back to a ‘live-able city’. However, the downtown core remains residentially viable for only young professionals. Many families avoid living in the city, opting for the suburbs which provide more amenities and open play space for their children.

Child-care and playground spaces within the city provide an amenity to families living in the immediate areas but also important for the role they play in creating destinations for children to experience the city.
North Franklin Street

As Tampa further develops, Franklin Street is set to become one of the more active pedestrian areas. Already the areas along Franklin provide interesting qualities within the city. Its historic materials and textures have been fairly well preserved, making it one of the more attractive areas in regards to rich experiences.

Already, mixed uses such as housing, offices, and shops have begun to activate the street. Many residential towers have been and are going in to the area. However, there are not many parks or amenities within a very close proximity for everyday use by residents, especially those with children. This not only creates a situation in which families want to stay out of the city, but also perpetuates the problem of streets that are empty, and thus perceived as unsafe.

The site for consideration is the Herman Massey Park and an adjacent vacant lot. While the project focuses on the design of the school, placement next to the park was important for the scale of the experience within the whole school and within the city itself. By opening up the park, and connecting it with the child learning center, a general use for the community and its children is established. This ‘perceived ownership’ by the child center,
although it is still a public park, will also promote the upkeep and safety of the park and area as well.

The site’s placement between the downtown core and more suburban residential settings allows the child center to serve both residential users as well as those who commute to downtown for work. For these people, a childcare center within walking distance of offices might mean that they are able to take a lunch break with their children in the park or allow them to play there longer on their way home from work.
Fig. 48. Site photo from Franklin Street

Fig. 49. Site photo from Tampa Street
Fig. 50. Site Study: Pedestrian Activity

Fig. 51. Site Study: Vehicular Activity
Fig. 52. Site Textures (a)

Fig. 53. Site Textures (b)

Fig. 54. Site Textures (c)

Fig. 55. Site Textures (d)

Fig. 56. Site Textures (e)

Fig. 57. Site Textures (f)

Fig. 58. Site Textures (g)
Fig. 59. Site Sun Pattern

**Sun Paths:**
Highlight differences of summer and winter light becoming difference in experience.

Fig. 60. Site Views

**Site Views:**
Iconic views (buildings) views as relationship to the entry. Place for children to view and observe the entry.
**Noise Levels:**

quieter levels on pedestrian Franklin allow for
pinpoint noises to be more clearly noticed.
Traffic levels provide consistent noises.

**Smells:**

Franklin as pedestrian street →
changing smells throughout the journey.
Park at stop in journey and entry into school
site.

Fig. 61. Site Noises

Fig. 62. Site Smells
Fig. 63. Site: Public Access
Fig. 64. Site: Child Center Access
PROGRAMMATIC DESIGN APPROACH

While some architectural process start with programmatic relationships that lead to a floor plan, this person oriented design process starts with ideas about what individual spaces need to communicate rather than a broad conceptual driver.

For this project, four major programmatic spaces are developed based on these moments and other goals developed from observing children in these typical settings. While these spaces are primarily designed independently, they are brought together and begin to influence and inform each other, creating a very non-linear seemingly disordered design process.
This thesis project focuses primarily on the design of a preschool and its connection to an existing public park. The preschools development draws heavily from the Montessori and Reggio Emilia educational schools.

For example, the physical relationship of the multipurpose space to the rest of the school is important for allowing community activities and parental involvement to take place within the school, as is often highlighted in Reggio Emilia schools.

The separation of two of the major program spaces, multipurpose space and classrooms, helps to accomplish this goal. Allowing the school to function for after-school age classes, after hours community classes, and parental involvement within the school creates an involvement that some would argue is needed in an urban school while still allowing for a sense of separation and safety for the preschool age children during certain hours.

This is accomplished largely by using the outdoor playground to separate the multi-purpose, more communal space from the classrooms and preschool offices. While the connections to the playground from both the multipurpose as well as the classroom spaces are fairly open and connected they remain flexible so that at certain hours or when it is needed the playground acts as a perceived barrier between the two.

The connection to the public park acts much in the same way. Certain functions within the multipurpose space may begin to use the public park, thus creating a strong connection between the two. However, during certain hours when the preschool children are using the multipurpose space it becomes the barrier which provides the sense of safety necessary for a preschool.

These types of relationships remain important for the holistic perception of both the school and park, both for parents and students. In fact, the difference in perception between parents and students becomes an important factor in the design of the school and its programmatic relationships.

For children, the sense of exploration and connection between the programmatic areas remains an important factor. Even the connection between the school and the public park cannot become to segregated as to create a sense of a fenced off enclosed school to which the child is limited.

At the same time parents and teachers, as well as public park users must have a sense of protection and separation between the school and public realm. The balance of these perceived boundaries and connections becomes an important factor in the relationship of programmatic elements and the holistic scale of design.
Fig. 66. Programmatic Relationships

Fig. 67. Programmatic Levels of Control
Fig. 68. Site/Program Visual and Sensorial Relationship Studies

Activation and character of Park influenced by school raises during the school hours. Effect of school on the perception of the public park.

Visual relationship between street edge and multifunction
QUANTITATIVE PROGRAM

Entry:
- Entry Courtyard (exterior) ..................................... 1000ft²
- Entry Hallway ............................................................ 550ft²

Multifunctional Center:
- Multifunction Space .................................................. 2000ft²
- Rest rooms (child and adult) .................................... 250ft²
- Storage ......................................................................... 100ft²
- Classroom/workroom (adaptable) ............................... 750ft²
- After-school/Community Lounge ................................. 350ft²
- Eating Area ................................................................. 500ft²
- Kitchen (with adult and child use areas) ...................... 400ft²

Classroom Area:
- Classroom (three years old) ................................... 450ft²
- Classroom (four years old) ................................. 550ft²
- Classroom (five years old) ...................................... 550ft²
- Children’s rest rooms ........................................... (3).ea 50ft²
- Storage ............................................................................ (3).ea 50ft²

Classroom Garden Areas (exterior) ......................... (3) .ea 150ft²
- Director’s office ............................................................... 150ft²
- Staff break room ............................................................. 250ft²
- Staff rest room ............................................................... 50ft²
- Staff garden (exterior) .................................................... 400ft²

Exploratory Playground:
- Hard-scape Courtyard .................................................. 900ft²
- Exploratory Landscape ................................................. 3000ft²
- Garden ............................................................................. 800ft²
- Garden workspace ......................................................... 400ft²
- Garden storage space .................................................... 90ft²
- Circulation ........................................................................ 200ft²
- Mechanical/Electrical .................................................... 300ft²

Total (interior) ................................................................. 7700ft²
ENTRY PROGRAM GOALS

Functions and Major Goals:
- transition from home to school
- calming transition
- sense of memory and recognition
- point of connection to public realm
- encouraging interest points

Program Activities:
- leaving parents
- apprehension
- excitement
- observation of activities

Fig. 69. Early Process Diagrams: Entry Condition
MULTIPURPOSE PROGRAM GOALS

Functions and Major Goals:
- community gathering
- group activities
- play
- exposure and observation as learning

Program Activities:
- morning activities
- interaction between different age groups
- after school and community based classes
- kitchen and eating
- indoor playground activities
- special functions
- parent involvement

Fig. 70. Early Process Diagrams Multipurpose Space
PLAYGROUND PROGRAM GOALS

Functions and Major Goals:
- outdoor explorations
- movement
- sense of discovery
- social interaction
- observation

Program Activities:
- interaction between different age groups
- motor skill development
- running climbing
- surface and texture explorations
- sandboxes
- chalk
- tricycles
- outdoor classroom groups
- small play groups
- individual play

Fig. 71. Early Process Diagrams: Playground
CLASSROOMS PROGRAM GOALS

Functions and Major Goals:
- home base,
- sense of identity for child,
- zones for different scales of activity and interaction

Program Activities:
- reading
- art
- dramatic play
- napping

Fig. 72. Early Process Diagrams Classroom
HOLISTIC DESIGN

While the major process is brought up through the four programmatic spaces, differing scales are considered throughout the design.

Holistic Scale:
- Relationship with site and conditions of the city.
- Relationship of the child with larger picture of life:
  childhood memories, community, sense of place

Intermediate Scale:
- Relationship of spaces
- Relationship and effects of social conditions
- Journey through or overall picture of sensory conditions in a space

Detailed Scale:
- Direct contact between environment and child
- Effects on social moments, individual, and emotional states
- Highlights of sensory conditions
Ground Floor Plan

1. Public Park
2. Community Garden Area
3. Preschool Entry Courtyard
4. Entry Hallway
5. Multipurpose Flexible Space
6. Student Eating Area
7. Kitchen
8. Playground Courtyard
9. Playground
10. School Garden
11. Garden Storage and Workspace
12. Five Year Classroom
13. Four Year Classroom
14. Three Year Classroom
15. Director’s Office
16. Staff Break/ Meeting Room
17. Teacher Garden Area
18. After-school Outdoor Courtyard

Fig. 75. Ground Floor Plan
Second Floor Plan

19. After-school/Community based workspace
20. After-school/Community lounge
Fig. 78. Site Diagram Plan Study
Fig. 79. Entry Floor Plan Key

Fig. 80. Entry Floor Plan
Fig. 81. Entry Section
Fig. 82. Basic Goals: Sensory Study Entry
Fig. 83. Tactile Qualities: Sensory Study Entry
Fig. 84. Light Qualities: Sensory Study Entry
Fig. 85. Views: Sensory Study Entry
Fig. 86. Sounds: Sensory Study Entry
Fig. 87. Smells: Sensory Study Entry
Building Approach and Park Edge

Approach to the building may differ depending on whether they are coming from the parking lot of pedestrian Franklin Street. Both approaches, however, led alongside of the public park and meet at the entry courtyard; a small seating area between the school and the public park.

As a child moves along these two entry paths, sounds of playground and morning multipurpose space activities begin to slowly be reviled and then hidden again. This balance of exposure and protection from visual and sensory cues to the activity may for some be hints that get them excited about the day ahead. For others, who are more apprehensive about leaving their parents and heading into the school, it may help to keep them from getting overwhelmed by the loud noises of children playing being exposed all at once as they enter the building.

Throughout this entry path, this idea of slow and smooth transition from calm to excited areas is accounted for. Ground and wall textures that their path follows along remain much the same and transition slowly into the main entry hall. Smells of the park and playground garden are reviled in the entry courtyard and right before entering the building which may conjure a sense of memory of this place, a constant every morning as they enter the school.
The entry courtyard seating element gives parents and children a place to stop if the child is feeling overwhelmed. It also allows visiting parents a place to have a picnic lunch with their child on their lunch breaks, or a place to stop and talk about the child’s day or play in the park when the weather is nice.
Fig. 93. Entry From Franklin Street
Entry Hallway and Screen

When first entering the building, both the child and parent are faced with the idea of separating from each other as the child moves into the class activities. During the morning hours, when the multipurpose space is active with children playing, views and sounds of the activity are revealed.

For some children, interest may be immediately sparked and they join in the morning activities without any trepidation. Other children, however, are likely to feel overwhelmed. Often, before children will join into group play activities, they will observe off to the side before feeling OK to join in. Seating along the entry hallway allows for children to observe the morning activities while sitting with their parents before they depart from each other, making the transition from home to school much more comfortable on the child.

Still, other children will not be as easy to comfort. Many school buildings do not offer adequate spaces for parents to move out of the way and take a moment to calm down a child and often offer even less distraction from the loud, sometimes overwhelming environment. Along the seating area in the entry hallway, parents have a chance to sit with their children. The use of a screen, which
would employ the use of morning light, both in winter and summer offers a small scale interaction between the child and the physical environment, in this case light, which has the opportunity to distract some children from the overwhelming activities and feelings about having to leave their parents.

Colored glass between the screen elements brings a sense of playfulness to the moving colored light and, while adults may pay little attention to this, some children may become interested in the patterns and shadows along the texture of the seating ledge and floor.

Even going as far as understanding how the child may move through the space becomes important. Although as designers we can not map out every spontaneous thought or action, understanding how a child might physically react to such a situation was helpful in figuring out what kind of light and textures to place where in the entry.

Through observation of children we can see that, often in this situation, the child will turn away from any activities, in this case the multipurpose space and face their parents. This seating ledge and screen element give a pleasant place for this to happen and allows the child to look at slightly more calming and pleasant visual stimuli.
Fig. 99. Screen From Entry Hallway
Fig. 101. Multipurpose Space
Fig. 104. Multipurpose Section
Fig. 105. Basic Goals: Sensory Study Multipurpose
Fig. 106. Tactile Qualities: Sensory Study Multipurpose
Fig. 107. Light Qualities: Sensory Study Multipurpose
Fig. 108. Views: Sensory Study Multipurpose
Fig. 109. Sounds: Sensory Study Multipurpose
Fig. 110. Smells: Sensory Study Multipurpose
Multipurpose Communal Space

The open, flexible space of the communal multipurpose area becomes a key interaction space both for children of the school and the community. Its function must easily change during different times of the day and provide for several different groups of people whose perception of the space may differ drastically from one another.

For children of the preschool, it becomes a space for major morning activities, and indoor play space where they can interact and play in small groups or alone until they are moved to the classroom areas. Adults and older children however, may use the space for large scale gatherings and social functions.

Immediately this program space is presented with questions of scale and it’s effect on the perception of space. It must provide smaller scale spaces for private or small group interactions for the younger children while also providing a sense of openness for the adults and older children. Differing levels and step seating, which to younger children can seem like nooks and zones may merely appear as steps to adults.
Reading Column Condition

In the multipurpose space there are several different zones for different scales of social interaction. Places for children to be by themselves is also important, especially when the multipurpose space is used for morning gathering and activities.

A small reading nook sits between the multipurpose space and the entry hall area, which has spaces for coloring and working along the window looking out towards Franklin Street. These two areas are separated by a series of columns which provide seating along the steps. The 'nooks' between the columns provide small seats in which children might feel comfortable by themselves. These columns and materials work with the roof structure to create light wells which provide children with their own natural light source for reading.

The small scale of the seating nook dictates clearly that it is created for children. Through out the research for the project, child scale areas that clearly state that this is for them, and not adults, has shown to give children a sense of ownership or belonging that makes children more comfortable with the space.
Fig. 117. Column Condition Study (B)

Fig. 118. Reading Seat Between Columns
Window Space Condition

Young children most often interact in small groups of two to three children at a time. Large scale open spaces can sometimes seem intimidating for these types of social interaction or for children who want to be by themselves. Seating areas and nooks for small groups are organized along the window edge. They provide more intimate settings for small groups while still keeping visual connection between the students and teachers within the larger area.

Here children might sit with small groups of children or find a space to play alone and observe others. Its placement allows it to look out onto the playground, which will serve to allow children to observe activities of other age groups on the playground. Observation seems to be particularly important for children, who often pick up and try new skills which they observed other children doing.

The area also functions to get children familiar with different weather conditions. During rainy days, for example, the multipurpose space will likely be used as an indoor playground of sorts. This window seating sits next to the playgrounds ramp which will allow children to learn about the flow of water and conditions of the weather. How the water flows off of the building and pavements become important learning tools which the building can provide.
Fig. 121. Multipurpose Window Area
Outdoor Patio

The multipurpose area also has an outdoor space that looks out onto the playground garden that is seen at the entrance into the building. While the patio area is outside, it is part of the multipurpose space and does not provide any circulation access to the playground or other areas. This gives children the freedom and control to move inside and outside on their own.

They are allowed and encouraged to explore and experience the difference between the inside and outside such as temperature changes, light qualities, smells. And while they can do this on their own, they are still contained in the space and visible to the teachers indoors.

This outdoor space would highlight and teach the child about changing times of day as well as year through both differing qualities of light as well as the garden. The placement of flowering trees in the garden would highlight the changing of seasons throughout the year. Yellow flowers falling onto the concrete create a visual and sensorial reminder of the world around them, time, and seasons, which is often times a factor lacking in many schools.
Fig. 125. Playground Model
Fig. 126. Playground at Garden/Lookout Area
Fig. 129. Playground Section
Fig. 130. Basic Goals: Sensory Study Playground
Fig. 131. Tactile Qualities: Sensory Study Playground
Fig. 132. Light Qualities: Sensory Study Playground
Fig. 133. Views: Sensory Study Playground
Fig. 134. Sounds: Sensory Study Playground
Exploratory Playground

The playground acts as a central courtyard for the entire school. Situated between the multipurpose space and classrooms, it becomes a major access point between the two and consists of three major zones.

The courtyard area, which is placed at the north end of the playground, is a hard-scaped area that extends out of the multipurpose space. Activities from here or the classrooms can extend to this area during nice weather. In this area, children can ride tricycles, bounce balls, and play with chalk.

Along the edge of the classrooms, a linear surface area promotes motor skill development activities such as running and climbing. It also aims to promote the sense of discovery. Changing vantage points as the children move up towards the garden area create differing spatial understandings and reveal previously unseen visual stimuli which encourage the child to explore further.

The garden area, where children are encouraged to participate in gardening activities, serves to show children the role of the environment and changes in seasons and time of day. This area also provides the students with a visual vantage point that allows them to look out onto the public park and city streetscape.
Fig. 138. Playground Looking South
Surface Undulations

An undulating surface which runs along the length of the playground, functions to provide motor skill development as well as sensory exploration of the outdoors. Sliding, running, and climbing the sloped surfaces all act as lessons in major motor skill development for children of the preschools age groups.

The sloped surfaces provide for this as well as the haptic explorations in the sandbox area which runs along the edge of it. Undulation of the surface allows for changes in scale and edge condition which influence social situations as well as the haptic explorations that take place. The changes in sectional scale allow for it to become a seat for conversation, a ledge for hiding behind, or a table for playing with sand.

The undulating surface functions to provide a sense of exploration corporeally as the child moves up it to the garden and lookout areas. Discovery and hands on textural changes also become major elements along the path. As a child, still developing their motor skills, leans over to support himself which climbing the sloped surfaces the paneled surface begins to break away into a series of differing textures that the children are encouraged to touch.
Fig. 141. Playground Sandbox and Undulation
Lookout and Garden Area

The southern most portion of the playground consists of the garden area and an open free-space for playing. This area, part of the undulating surface, is raised from ground level and gives children a lookout point to the Public Park and city street.

Here, the sense of discovery is emphasized as the child moves upwards through the playground and finally reaches the top point where views and the garden area are revealed.

Sensorial factors, as always, help to reinforce the ideas inherent in the activity and use. For example, as the children move up the playground from between the two main buildings there will likely be some breeze. However, as they reach the top and the edge condition changes, more apparent wind will likely be felt depending on the weather conditions. While some children may not notice this change, their overall corporeal experience will certainly reinforce and enhance the sense of being about and looking out over the city.
Fig. 144. Classroom Section Model
Fig. 147. Classroom Section
Fig. 148. Basic Goals: Sensory Study Classrooms
Fig. 149. Tactile Qualities: Sensory Study Classrooms
Fig. 150. Light Qualities: Sensory Study Classrooms
Fig. 151. Views: Sensory Study Classrooms
Fig. 152. Sounds: Sensory Study Classrooms
Fig. 153. Smells: Sensory Study Classrooms
Growing with Classrooms

Classrooms represent the home base within the school for many of the children. In each classroom, it is important that the child have a sense of belonging and identity. The classes, which are organized linearly along the playground, change slightly to adapt for each age group as they get older.

For younger children, ages two to three years old, play and learning is primarily done individually and social interactions between children are usually limited to one other student. For them, large groups may sometimes be overwhelming. The younger age classrooms therefore, have several nooks and small zones in which children can play comfortably individually or with a friend. Zones are created with slight level changes, and low walls that still keep a visual openness to the room from the teacher's perspective.

As the children get older and move up in classroom, the spaces begin to open up slightly to allow for larger social groups as well as class group meeting times. However, even as the classrooms open themselves up to larger continuous space, they all feature areas where children can 'get away' to be by themselves or in smaller groups.
Fig. 156. Classroom Interior
Classroom Entries

Each classroom needs to have a clear identity that the students can easily connect with. This is particularly important when students are going into their classrooms or when they are looking back to it from other vantage points in the school.

Next to each classroom entrance display windows, each in a readily identifiable color, are places where students can display their work. Drawings, Paintings and other artistic explorations are important to the Montessori Method of teaching. Allowing student’s space to display their work not only gives a sense of pride and identification, but also allows different age groups to see each other’s work.

Exposure to others work is important for the learning process. Students can either remember back to other projects that they did similarly or, more importantly, can be exposed to new things which they may then begin to explore on their own.
Cubby Window Seats

Similar to being exposed to other’s work as a learning tool, observation of the activities of others teaches children and shows them new things that they can try to do.

Opportunity to watch other age groups on the playground is created by a window seat along the classroom facade. When children are feeling afraid this may be their ‘comfort’ space. The soft material for seating is on top of the children’s cubbies, where they would have access to their things such as blankets and comfort objects. Children that want to be alone may sit here and read, nap, or watch other age groups play on the playground.

The cubbies themselves are moveable. During certain times of year when the weather is nice, cubbies can be moved to the interior wall between classrooms and the window itself can become an open doorway. Classroom activities can then spill out onto the steps that look out onto the playground.
Fig. 162. Classroom Cubby Window Seat
Quiet Area and Garden

The ‘quiet area’ of the classroom primarily serves as a reading nook for more passive classroom activities. This area is raised from ground level to create a clear separation from the rest of the classroom. This platform, which is made with softer materials for sitting on the ground surface, looks out over the classroom garden area.

The garden area is accessible to the classroom activities and provides a place where children can participate in hands on gardening as part of their learning experience.

From inside the classroom, children can look out the window onto this garden that they have had a part in creating. During rainy days, drainage spouts and rock water collection surfaces become interesting features that the students can watch from the quiet area platform.
This thesis has largely been an exploration into the relationship between people and places.

Architects and designers can never predict exactly how someone will use and feel within a space. Throughout this thesis, the word *exploration* is used in place of a word with more direct connotations and project narratives talk about what *could* or *might* happen.

As much as we study a particular user group, individual people will not always follow into a particular activity or use that the space aims to promote. This inability to pin-point perception however, should not deter architects from trying to understand the habitants of their architecture.

This spontaneity of space and people should also not be forgotten nor thought of in a negative way. This spontaneity of individuals is what brings the architecture to life.

Essentially, as architects we study two major things, physical environments and people. As segregated as these two may sometimes seem, each must be considered in reference to each other instead of separately.
BIBLIOGRAPHY


