

DE—FENCE

The Child and The City

by

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author's declaration

I hereby declare that I am the sole
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abstract

Every year, after the first heavy snowfall, the city blends together under a soft, white blanket. Curbs, carefully edged garden beds, sidewalks, and sewer grates are obscured and it appears as though no one has ever taken a step on a single square inch. Gradually, though, boot prints and tire tracks begin to redefine the city, their ingrained paths making the boundaries of busy roadways and private yards clear again.

To be a very young child in the city, is perhaps a similar experience. The spatial boundaries that are so distinct for adults hold no charged significance for children who revel in exploration and for whom the city is still a blank canvas. Their naiveté only gradually gives way to a fear of unbounded space, reinforced by the cautions of their parents and societal authorities.

Recognizing the ever increasing complexity of the environments in which children must develop and act, it is imperative that we find a means for understanding how they might be better accommodated. Children appropriate the streets differently than adults—they blur boundaries and test limits. This thesis challenges the strict delineation of the urban context to make room for children. In contrast to the rather rigid definition of a city typically held by adults, the thesis aims to offer a child-like vision of malleability and curiosity in an attempt to restore ownership of the city to children.

Through photography, drawing, story-telling, and historical pedagogical research, along with the commented study of precedents from artists, architects, and other urban activists, the thesis offers a compilation of observations that promote a better integration of children in our cities. Rather than fencing in their creativity, we must strive to foster their inherent playfulness, removing the constraints that limit their spatial, temporal, and conceptual development.

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dedication

To Little Miss Laure,

For taking me off the beaten track and
leading me on meandering paths.

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This journey began a decade ago, when I held an SLR camera for the very first time. I wandered around Granville Island in Vancouver, a place so bustling with activity that even the rain failed to mask its vibrant vivacity. Granville Island is one of those rare places where you can find tranquility in an unexpected place, in the sense that the peninsula is bountiful in activities and yet each element works in harmony, accentuating one another in accord. What captured my attention was the two small children running through the playground. As they darted across the asphalt, my gaze trailed their movements. I was amazed at their spontaneity and ability to enliven a barren space in an instant. I snapped a photo, hoping that I could capture a hint of their enthusiasm.

...for I have forgotten what it is like to run free.



If I were to ask you to picture a child in the city, what image comes to mind? How would you describe the characteristics of your neighbourhood to a visiting friend's child? Despite all of us grown-ups having gone through the experience of childhood, once we reach adolescence and embark on the journey into adulthood, we seem to forget what it was like to be a child. Compounding the problem is the fact that we rarely have the opportunity to interact with children, unless we decide to become parents. Do you remember the last time you played in a sandpit, ran up a slide, jumped off of a swing, or hopped over a fence? Can you recall what those experiences felt like? This thesis hinges on the proposition that to design for children we must do so with their needs and desires in mind, rather than from our adult perspective alone.

Children living in the modern city are often deprived of the opportunity to explore and to satisfy their wondrous curiosity, as parents have become fearful that our society is simply too dangerous for children to venture out into on their own. This fixation on safety has inadvertently repressed the fundamental components of childhood: adventurousness, independence, risk, and inquisitiveness. Much of the contemporary unease can be traced, at least in part, to fears instilled in parents' minds during the 1970s and '80s, when increasing litigation over playground injuries and media coverage of childhood abductions inflated anxiety and fear.

In 1978, a two-year-old boy, Frank Nelson, climbed up a 12-foot slide with his mother a few steps behind him in Hamlin Park, Chicago. The play structure was nicknamed the "tornado slide" due to its spiral shape, swirling in circles on the way down. As the toddler reached the top of the step, he fell through a gap in the railing and landed on the asphalt, on his head. The accident fractured his skull, causing the boy to suffer brain damage that resulted in paralysis on his left side as well as impairing his speech and vision. The following year, Nelson's parents

sued the Chicago Park District, the slide manufacturer and the company that installed the slide for negligence, raising concerns regarding the use of playground equipment, adequacy of playground surfaces, supervision of playgrounds and necessity of warning signs.¹

On the early morning of May 25, 1979, 6-year-old boy Etan Patz, dressed in a blue outfit with a pilot cap, in hopes of proving his independence, walked by himself to the school-bus stop for the very first time.² Etan's parents had debated if it was a suitable time to let Etan walk to the bus stop alone—it was a privilege the 3'-4" boy had begged for all year. The bus stop was located on the corner of West Broadway, a block and half from his parents' apartment on Price Street in the SoHo neighbourhood of New York City. His mother stood out on the fire escape of their apartment and saw her son walk one block to the corner. Reassured that there was no eminent danger, she turned around and went back upstairs. That was the last time she saw her son. Etan vanished that day before making his way to the bus stop and to school; his disappearance sent a jolt through New York City and instilled fear in parents raising kids in city neighbourhoods that had previously seemed so unsuspecting.³

Injuries and lawsuits upended the serene notion of childhood for parents — the cohesion of community disintegrated as apprehension loomed, transforming gradually into a belief that accidents should be averted rather than accepted as a natural occurrence of life. Regulations and stringent rules were enacted in an attempt to control the number and severity of accidents, in the hopes of preventing recurrences of incidents similar to Etan and Frank's. In Frank Nelson's case, the family was granted a settlement guaranteeing a minimum of \$9.5 million and possibly as much as \$29.8 million if Frank lives to be 75. After approval of the Nelson settlement, several types of play equipment were removed from the city's 516 parks by the Chicago Park District with the intention

of averting future expensive lawsuits. The reorganization of playgrounds included eliminating all 200 spiral “tornado slides”, rides such as merry-go-rounds, along with other structures (slides and climbing bars) higher than six feet.⁴

Etan’s case, meanwhile, sparked the missing children’s movement which resulted in new legislation and methods for tracking down missing children, including campaigns to raise awareness of abduction; Etan was the first missing child to be featured on the side of a milk carton. The President of the United States at the time, Ronald Reagan, designated Etan’s disappearance date, May 25, as National Missing Children’s Day.⁵ Preoccupation with safety has created a culture in which children no longer have the comfort of wandering the city streets on their own: they are constantly under the watchful eyes of their guardians. When they are not kept at home, they are chauffeured in automobiles and escorted along their every step. However, this obsessively attentive parenting could, in fact, be detrimental to children’s development, creating boundaries between children and stifling a creative engagement with their environment.

As I am putting the final touches to this document, the Etan Patz case trial has just begun, nearly 36 years after his abduction. The pervasiveness of fear has not waned. In fact, it seems to have only increased. What is to be said, then, not simply about Etan’s case here, but more generally about the imagined and real confines that the fear of other cases like his have brought about? How do we perceive our cities today and what plans can we make for children in them? What opportunities for exploration, play, and imagination still exist in the contemporary city? These are some of the questions this thesis sets out to investigate.

DANGEROUS CITY

(AS SEEN BY ADULTS)

A Finnish lady told me that one day she was standing at a bus stop with a 5 year old girl. When the bus drove up the child popped out into the road right in front of the bus and was snatched back at the last moment by the frightened adult. 'But why did you do that?' 'I just wanted to see what the bus looked like from the front!'

— Stina Sandels, *Children in Traffic*

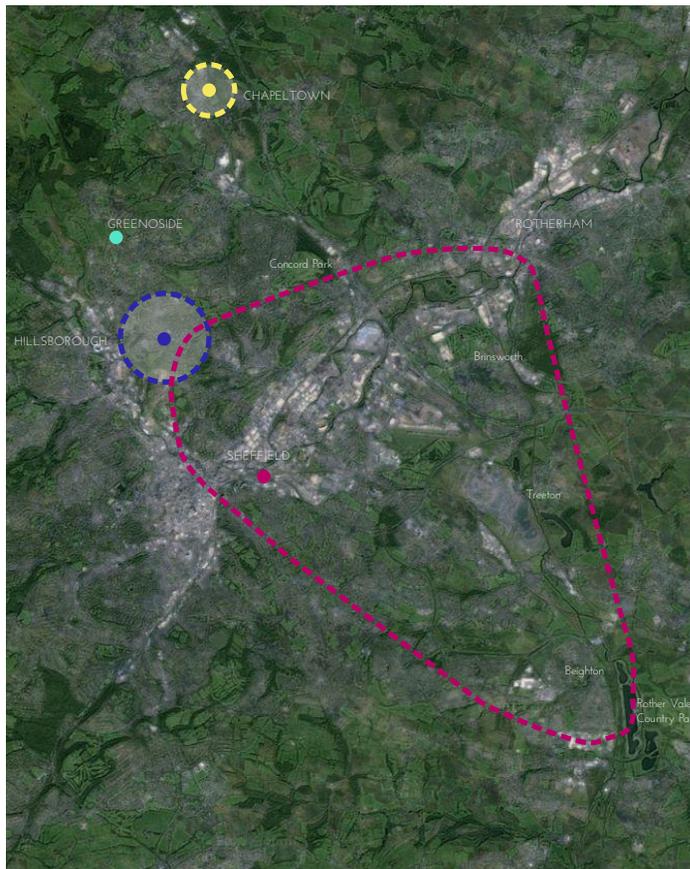


FIGURE 1.2 Right to Roam Map

- GREAT-GRANDFATHER:
George aged eight in 1919 was allowed to walk six miles to go fishing.
 - GRANDFATHER:
Jack aged eight in 1950 was able to walk one mile on his own to go woods.
- MOTHER:
Vicky aged eight in 1979 was allowed to walk to the swimming pool alone half a mile away.
 - SON:
Ed, now eight is only allowed to walk on his own to the end of his streets (300 metres).

Over-cautious parenting has led to diminished engagement between children and their city. Parents respond to the ever increasing clutter and complexity of the environments which children have to navigate by enacting restrictions. They want to make sure their children remain within spaces that they feel they can control. But this sphere of influence appears to be continually diminishing. In an article on *UK Daily Mail* titled “How Children Lost the Right to Roam in Four Generations”, areas that children are now free to explore are compared to the territory that was once considered safe. The gradual contraction of space is evident in the diagram on the overleaf showing the shrinking size of territory that four generations of children in the same family were allowed to wander on their own. The areas children are allowed to explore unaccompanied have drastically decreased to only a small radius around their apartment as compared to the wide-roaming children of previous generations. The great-grandfather of the anecdotal study had a vast territory of landscapes ranging from hills to plains to rivers compared to his great-grandson who is only allowed to walk from the front stoop of his home to the end of a small block.⁶ As their territory shrinks, modern children lose a sense of ownership of their surroundings and are denied the chance of exploring. Confined to designated areas such as parks, school playgrounds, and backyards, and almost always under adult supervision, childhood experiences become more and more uniform. Put simply, children have less and less space to call their own. As their territory shrinks, modern children lose a sense of ownership of their surroundings and are denied the chance of exploring. The following three examples, observed in the city of Toronto, illustrate the phenomenon of adults becoming strict in their reading of the city and less malleable in shifting their preconceived mindsets.



FIGURE 1.3 Clinton Junior Public School schoolyard in relation to the urban context

07.16.2014

A woman, short-winded, flustered and exasperated, scurried down the sidewalk towards my direction as I reclined on the lawn and fiddled with blades of grass. She uttered a strings of slurred and unintelligible words to me. Noticing my incomprehension she repeated the phrase frantically, this time coupled with hand gestures. "Have you seen a boy around 4 feet tall, dark hair, in shorts, running down this way? He ran away from the school!" She spoke after catching a breath and scanned the perimeter of the playground located beyond the chain-link fence that I was leaning on. My contentment on this serene and sun-drenched afternoon was quickly disrupted and my mind turned to the woman's desperation. Before I managed to respond, I instinctually gazed at the direction of the school, north-east to where I stood. *Oh that makes sense*, a phrase processed in my head in mere milliseconds, *Clinton School doesn't have any fences*. Deep in my own thoughts, my eyes glanced to meet hers, "No sorry. But I will keep an eye out for him. Good luck!" Despondent with my answer, she returned to her frantic search.



FIGURE 1.4 Carpark 85

07.16.2014

The public parking lot near Bathurst Station stretches between Markham Street and Palmerston Avenue, encompassing the length of a whole block and providing over 60 parking spots. Two parking meters are installed for payment, one located in the centre of the lot and the other adjacent to Markham Street.

As my friend fiddled with the central machine, my eyes panned around the parking zone and saw a mother standing next to her black SUV. Its open doors allowed me to see the passengers inside: one boy roughly age 5, and a girl around age 9. My friend informed me that the machine was malfunctioning so we made our way to the other machine. The woman caught on to our situation, packed up her belongings and alerted her children that she would need to pay elsewhere. She quickly followed us, and as we were all approaching the second metre, I heard a young girl calling, "Mom! Mom!" The 9-year-old had ran after her mother, which took her mother by surprise. The girl continued to say, "Mom, you forgot your wallet, so I brought it for you!" Misunderstanding her daughter's thoughtful gesture, the mother first gave a sigh then responded curtly, "Why are you here? You shouldn't run after me! This is a parking lot. There are cars, did you watch if there were cars coming?" The girl fell silent; her thoughtful act was greeted by her mother's dismay, "I don't need the wallet, I took some money with me. Thank you for your help, but now your brother's on his own! We have to go back now, you shouldn't have left the car, now you're leaving your 5 year old brother all by himself. You can't do that!" The mom grabbed the wallet from the little girl, and proceeded to walk back to her car.



FIGURE 1.5 Merry-Go-Round at Christie Pits Park

06.06.2014

The curious disappearance of a metal spin structure from the Christie Pits park playground — in its place, a set of spring ride-on toys suited for toddlers. I uttered my disappointment aloud when I saw the new rocking toy and a father nearby also chimed in, voicing his dismay that his children had been eager to hop on and spin the wheel but were surprised when they arrived to discover that it had vanished. Though both play structures have the same colour scheme, red accented with black, reminiscent of a lady bug, they cater to distinct age groups. The rocking toy has become ubiquitous in playgrounds, easy to operate, trusted by parents, but lacking the element of excitement and risk to sustain a child's interest. The metal wheel, though simple in concept, allows children to test their own limits, experimenting with how fast to run, how much to spin, and how to attune their abilities to the consequences their actions would affect on other players or themselves. The game encourages collaboration between multiple children, or with other adults. The disappearance of the spinning wheel signifies a new era of playground in Toronto, one of excessive safety concerns and standardized play equipment smothering children's free play.

For the frantic teacher, the space extending beyond the perimeter of schoolyard is viewed as an unprotected territory of a perilous city. For the distracted parent, the space of the parking lot, dedicated to automobile usage, remains potentially dangerous even in the absence of cars. For the concerned observer, an outdated metal spin structure is labelled as a hazard once the standard plastic play equipment becomes ubiquitous in playgrounds. What we see in these three examples is the desire for the adults to maintain a firm reading of the boundaries between safe and dangerous spaces. While this is comprehensible from a safety perspective, it also denies children the opportunity to make informed assessments of their environment. There is limited trust in the ability of a child to assess dangers, and little faith in the car driver's ability to anticipate the meandering of pedestrians walking about in the parking lot, or nearby the school yard. Territorial boundaries become the primary means to mediate interactions between cars and children. In fact, the boundaries prevent the need to mediate as they work to eliminate interactions altogether.

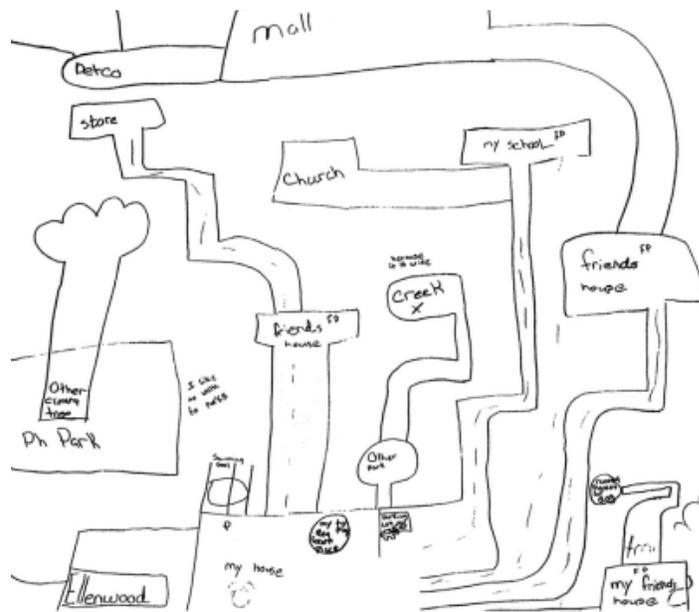


FIGURE 1.6 Map drawn by a 10-year-old from an automobile dependent neighbourhood in California, USA

Many studies have been undertaken to measure the impact of the ways in which we evaluate risk and navigate the city in the past decades. Our relationship with the city is skewed as overprotective parenting has led to diminished engagement between children and their city. Parents have become accustomed to fearing the minutiae so much that the thought of their children engaging with the city at large terrifies them. Children shadowed by their parents lose the ability to assess situations on their own, detaching them from relationships with their neighbours, their neighbourhood, and the city as a whole. Bruce Appleyard, an urbanist researcher, conducted a cognitive mapping study in Contra Costa County in California called “Livable Streets for Schoolchildren,” in which two groups of children aged nine to ten were documented and compared. One group consisted of children from a high traffic neighbourhood who were most often accustomed to being driven everywhere while the other was composed of children from an area with less traffic who were free to navigate their neighbourhoods on their own. The children were asked to draw and label their neighbourhoods using warmer hues to signify danger and cool hues to represent positive elements.⁷

The group of children used to being chauffeured by their parents considered their neighbourhoods with feelings of unease, their drawings laden with hot red and orange colours. The drawings lacked details of the surrounding environment. For instance, the busy tree-lined street in front of the school, Newell Avenue, was starkly drawn devoid of trees. However, the children were keenly attuned to the potential risks of a main road, highlighting the area in warm hues to represent their perception of potential danger.⁸ Moreover, the illustrated maps of their neighbourhood featured a series of disconnected roads that lead separately to and from different destinations.

Meanwhile, participants from the light traffic exposure neighbourhood who were allowed to wander more freely, demonstrated

a vivid perception of their environment, noting more elements such as the streets, houses, trees and other objects with fewer signs of cars and dislike. The children also illustrated 43 percent more locations in their streets that they enjoy relative to the children in the heavy traffic exposure neighbourhood. The disparity between the two groups was stark. The mapping exercise revealed vehicular traffic diminished children's connection to their community and neighbours. The group of children who were used to being chauffeured displayed a much poorer comprehension of the geography of the places they live in and possessed a less accurate understanding of the landscape of their neighbourhood in comparison to the group who were encouraged to venture freely.

Children who grow up in a city are often confined to prescribed spaces and routines: sleeping in the bedroom, eating in the dining room, playing in the playground, reading and writing in classrooms, staying in daycare before school or attending after-school lessons. Each activity is supervised and contained for the purpose of safety with walls or fences that delimit movement. In this regard, a child's life revolves around zones and destinations rather than the journeys from point A to point B. For instance, for a child to arrive at school, he or she is either chauffeured by a parent, sent on a bus, or escorted by foot. In the case of chauffeuring in a car or on a bicycle, the child is transported directly from home to school within the bounds of the vehicle. Even though walking to school is less confined than the experience of riding in a vehicle, the child is still being monitored by watchful eyes. Free movement is often restricted to half a block (or as far as the child's guardian can see and communicate) due to the presumed dangers looming in the city and its traffic. In a recent survey commissioned by Playday, a group that celebrates children's right to play in the United Kingdom, a poll was conducted of a thousand parents who had children between the ages of 5 and 16. Fifty-three percent of the parents named fear of traffic as a

main reason for keeping their children indoors followed by the fear of strangers at thirty-five percent.⁹

In response to both the threat and fear of the street, Noordlaren, a small village in the Netherlands, integrated a *shared space* philosophy into their road design. The concept of *shared space* was first proposed in 1991 by a Dutch road traffic engineer named Hans Monderman.¹⁰ In this urban design approach, boundaries between vehicles and pedestrians are blurred by removing traffic signals, formal crossings, road markings and curbs. Though the newly establish conditions at first appear more dangerous than usual, the increased necessity of negotiation fosters intrigue, uncertainty and ambiguity, prompting users to be adaptive. By rejecting segregation and minimizing demarcations amongst the different vehicles and bodies, a more balanced state is reached, encouraging interaction and awareness, prompting street users to modify their behaviour and movement based on their perception of risk. Furthermore, Monderman noted traffic efficiency and safety improved when the street and surrounding public space were redesigned; the less-is-more concept helped to facilitate eye contact between all users, and eliminated distractions caused by the clutter of signage.

Noordlaren Primary School's playground is adjacent to the major road in the village. In order to combat the fast vehicles that cut through the town centre, the municipality adapted Monderman's general principles and integrated the road with the playground. Rather than erecting a tall fence, the school installed a low, 15-inch high metal bar with round slidable colour beads reminiscent of an abacus. Instead of a depressing cage-like structure, the children get the opportunity to sit on, hop over, fool around with and play with their 'fence'. The minimum obstruction serves to divide the space but extends visibility from the playground to the road, allowing the children and drivers to maintain a visual connection.¹¹ A new relationship emerged: children grew

perceptive of the incoming traffic and learned to adapt to how vehicles operate on their own accord, instead of relying on a large barrier to shield them from danger. Respectively, the drivers became more attuned to children's sometimes erratic movements, under the impression that they were driving through the primary school's playground. Adapting to communication cues and relying on eye contact and gestures to proceed, all the road users negotiated their passage rather than feeling entitled to designated parts of the road.

This model of street design has been compared to being on an ice skating rink by Ben Hamilton-Baillie, a British urban architect and shared space advocate and consultant. Smooth and harmonious movement is fostered by human interaction, relying on social protocols rather than defined control systems.¹² The shared space approach echoes Japanese city planner and landscape architect Reijo Oya's 1924 research, testing ideal road designs for children. Oya noted that an increase in traffic accidents was linked with the changing structure of roads. Whereas the prior model of street design had allowed hawkers, horses, dogs, bikes, cars and people to co-mingle, new road designs gave priority and dominance to motorized vehicles.¹³ Though the study was completed nearly a century ago in a dramatically different era, the problems of segregated traffic continue to be an issue.

Jane Jacobs (1916-2006), the American-Canadian urban studies activist, advocated the importance of sidewalks and streets for children's growth and development in her book titled *The Death and Life of Great American Cities*. She emphasized the benefits of sidewalks as communal space in addition to serving as thoroughfares for pedestrians. She argued the significance of sidewalks in comparison to parks and playgrounds, proposing that sidewalks are safer due to the number of people on the streets watching over the children. In contrast, the lack of constant activity in designated leisure zones such as parks and playgrounds

results in a less safe environment, unless the park is small enough to be located in the middle of an active and vibrant street. Jacobs advocates the importance of being on the street and taking responsibility for one another, “in real life, only from the ordinary adults of the city sidewalks do children learn — if they learn it at all — the first fundamental of successful city life: People must take a modicum of public responsibility for each other even if they have no ties to each other. This is a lesson nobody learns by being told.”¹⁴ Her statement emphasized on civic engagement and the concerns raised by Jacobs as city dwellers lose touch with their city are evident in Figure 1.2 Right to Roam Map as well as Figure 1.6 Automobile Dependent Map. Both diagrams reinforce Jacobs’ urgency in advocating that children be allowed back onto the street, pushing back against the increasing preoccupation with perceived insecurity in the city.

The sidewalk also acts as a platform for nurturing social awareness and civic duties, assimilating children into civil society. Mingling with a diverse group of neighbours consisting of women and men, young and old, expands children’s viewpoints. The integration of people from all walks of life on the street fosters a collective and responsive environment where children do not simply learn from what is told to them by their parents but by personally experiencing negotiation in action. Jacobs emphasized repeatedly that the fundamentals of a successful city life lie in mutual reciprocation of respect where “people must take a modicum of public responsibility for each other even if they have no ties to each other.” She recounts an example of her son being reprimanded by a shopkeeper after he had ran out into the street. The incident was then conveyed to Jacobs and her husband by the worried observer. Her son in turn received an overt lesson in safety and obedience. Moreover, the onlooker’s reaction to the child’s transgression indirectly exhibited a lesson that people other than his parents felt responsibility for



FIGURE 1.7 Crawley Adventure Playground in the United Kingdom, 1955

him.¹⁵ Considerate and active social behaviour is ingrained in a healthy street life, symbiotically promoting city dwellers to take responsibility for what goes on in city streets.

In conjunction with research done at Auckland University of Technology and Otago University in promoting the idea of active play, Swanson Primary School in New Zealand eliminated the implementation of rules during recess, including the prohibition of climbing trees or riding bikes. Since the new implementation, administrators saw a decline in rates of bullying, injuries and vandalism, as well as an increase in students' ability to concentrate during class. Activities including bike riding, mudslides, skateboarding and tree climbing kept the children occupied, practically eliminating the need for a timeout area or reducing the number of teachers required on patrol duty.¹⁶ Children used their imagination to play in a "loose parts" pit which contained debris such as wood, tires and an old fire hose. This strategy of play could be traced back to the Adventure Playgrounds first created by Danish architect, Carl Theodor Sørensen¹⁷ during the post-war period in Denmark. Sørensen had noticed that children enjoyed playing in an under-construction playground far more than a newly completed one and decided to create environments that retained qualities of malleability and exploration.

The Adventure Playground movement was later adopted by British landscape architect and child advocate, Lady Allen of Hurtwood. Developing after World War II, the Adventure Playground had none of the usual pre-fabricated play equipment such as slides, seesaws and swings but was instead filled with waste materials. The concept of the adventure playground was for children to introduce their own content and meaning to the play area through experimentation in making and destroying—they fostered an environment of accidental play. The abundance of waste material on site enabled the children to dig, build houses, experiment with sand, water, or fire, and play games of adventure



FIGURE 1.8 Wonder Space II, by Toshiko Horiuchi
MacAdam at Hakone Open Air Museum in Japan, 2009

and make believe. Lady Allen felt that the adventure playground would help children process and reinterpret the rubble, providing a narrative for postwar reconstruction while also doubling as a healing device to repair the physical and psychological trauma inflicted by the war. She once proclaimed, “Better a broken arm than a bruised spirit,” to New York parents encouraging them to sue the city “for emotional damage¹⁸ to their children because the city failed to provide suitable and exciting playgrounds for them.” The generic play spaces that come to mind at the mention of ‘playground’ are swings and slides, but these formulaic structures lack the dynamism necessary to promote imagination and for play to flourish. To a far greater degree, sand boxes and bales of hay give kids the ability to manipulate the world around them, allowing them opportunities to explore and test their limits. The real challenge lies in letting go and giving children the freedom to play in ways that push their limits, and ours.

In a *New York Times* article titled, “Can a Playground Be Too Safe?” John Tierney argues that playground safety is detrimental to the development of children’s play. He deemed conditioned playgrounds to be more harmful because “if children and parents believe they are in an environment which is safer than it actually is, they will take more risks.”¹⁹ For instance, softer playground surfaces, perceived to be safer by both parents and children, lead children to believe that harm is mitigated, intuitively overestimating the performance without understanding the material properties. Risk-prone activity becomes normalized causing difficulty in judging boundaries and dangers beyond the confines of the playground. This view is reiterated in the study, “Societal Values and Policies May Curtail Preschool Children’s Physical Activity in Child Care Centre”, published in the *Pediatrics Journal*.²⁰ The lead author Doctor Kristen Copeland, a researcher at Cincinnati Children’s Hospital Medical Centre, noticed that young children lose interest in newer

and safer equipment because they master the game faster. In response to a dull game, the children test limits and challenge the structure in unexpected ways, walking and running up the slide or climbing on parts unable to support their body weight. Children who are brought up under the presumption safety, in overly curated environments lose their ability to properly assess risk. As steep metal slides and wooden towers are exchanged for rounded plastic slides and meticulously inspected climbing contraptions, a Catch-22 has emerged. Alice G Walton sums up the problem succinctly in her article on playground safety, “Safety guidelines, which are admittedly important, can defeat the very purpose of the playground: rather than promoting physical activity, they are dampening it.”²¹ As risk is eliminated from playgrounds it seems fun is as well and in response to the effort of preventing danger, children create their own hazards.

An alternative approach can be found in the Knitted Wonder Space, a playground designed and constructed by Toshiko Horiuchi MacAdam, a Japanese textile artist. In an interview with Arch Daily, an online website covering news related to architecture, MacAdam recounted the day when she first exhibited a 3-dimensional open-work textile sculpture that she had created and, shortly after, saw some children climbing its lattice. The urge and movement exhibited by the children brought life to her sculpture, “My eyes were opened. I realized I wanted just such a connection between my work and people... I realized I was in fact making works for children.”²² The realization became motivation for her to design play structures. The Knitted Wonder Space playground is located inside the Woods of Net Pavilion designed by Tezuka Architects, at the Hakone Open Air Museum in Japan. It is a textile structure consisting of hand-made crochet nets on which children are encouraged to bounce and run. The net membrane is sensitive to children’s slightest movements, capturing their energy and redirecting

the motion back to the initiators. The highly responsive and wave-like motion of the net connects children and promotes collaborative play stimulating their creative minds to generate new ways of playing while at the same time helping them develop social skills as they learn to cooperate with one another. The collaborative aspect of play is crucial especially in an era when urban children are limited to spaces dominated by parents. The problem is exacerbated in Tokyo where children often grow up in cramped high-rise apartments without siblings to interact with. The artist believes that “if you give them a challenging play environment, well designed so children can assess risk, they will not get hurt. Our structures encourage children to challenge themselves but with many routes and options. There is no program of play. There are always alternatives. Each child plays at the level he or she is comfortable with.”

What the short series of examples start to reveal is the range of uses unveiled when we consider children as an integral part of our cities. Children are spontaneous, unpredictable, quick and curious. They will test limits, and do need to realize that some boundaries are less elastic than others. They are avid players but also avid learners. The negotiation between different dimensions presented such as physiological and educational aspects as well as the dramatic moments and playful interactions all contribute as means in integrating children to their cities.

In light of the impact that our emphasis on risk has on the well-being of children in our cities, we will look at historical trends in both education within cities and the relation of children to cities. The next two chapters will consider studies in psychology and pedagogy, followed by investigation into the realms of art and architecture, to shed light on how children have been considered in the past hundred years. In the final chapters, the focus is directed specifically to the city of Toronto, examining ways in which the current situation can be catalogued and challenged.

PERCEPTION

AND

PERSPECTIVES



HISTORY OF PERCEPTION OF CHILDHOOD

The interest in the early education of children is quite recent, dating back to the early 19th century. Children were represented as mini-adults before the 17th century and it was not until the late 17th that philosophies on the education of children began to support the notion that childhood training resulted in the development of adults who were more likely to make active contributions to society. The 17th century Enlightenment period emphasized ideals of childhood innocence, as opposed to the mediaeval concept of the child as a natural-born sinner. The British philosopher John Locke (1632-1704) was particularly influential in defining a new attitude towards children, a belief that children's fresh minds, similar to the idea of *tabula rasa*, were a blank slate¹ requiring parental guidance to invigorate with proper and fruitful ideas. Meanwhile, the Genevan philosopher Jean-Jacques Rousseau (1712-1778) illustrated a romantic attitude towards children in his novel *Emile, or On Education*, describing childhood as a brief period of sanctuary where children are governed by impulse and sensation before encountering the perils and hardships of adulthood.² Unlike Locke, Rousseau believed adult influence would hinder children's intrinsic moral sense and thoughts focusing on a child-centred philosophy advocating the importance for adults to be receptive to the child's needs before they reach adulthood. By the early 19th century, Swiss pedagogue and educational reformer, Johann Pestalozzi (1746-1827), developed the doctrine of *Anschauung*, sense perception, where the active and intuitive mind was the basis of all knowledge.³ Pestalozzi's motto was "learning by head, hand and heart" explaining that a child perceives objects through the senses by activating and transforming sensory impressions into conscious thoughts.

Drawing on the ideas of Rousseau and Pestalozzi, German pedagogue, Friedrich Froebel (1782-1852) advocated for a practice of education where the child and the teacher work in tandem, with play

and self-activity as the basis of the learning process. Froebel created the concept of *kindergarten*, children's garden, where the teachers are "gardeners", unearthing and cultivating children's potentials.⁴ Froebel asserted the importance of a stimulating environment to engage young children as they strive and learn. During the late 19th century, John Dewey (1859-1952), an American educational reformer, also advocated a pragmatic approach, creating opportunities for students to interact with their environment in order to adapt and learn, emphasizing the importance of a "hands-on" education. Similar to Froebel, Dewey regarded the role of the teacher as a facilitator for the children rather than an instructor. He argued in the essay *My Pedagogic Creed* that much of education fails due to a neglect in addressing the principle that school is, at its heart, a communal and social experience instead of merely a venue where habits are formed and lessons are taught.⁵ Maria Montessori (1870-1952) was an Italian educator notable for the education philosophy that bears her name, developing an alternative system of schooling during the same period as Dewey. Montessori, similar to the other 19th century educators aforementioned, focused on a child-centred education, valuing the classroom environment as a vital component of the learning experience.⁶ Montessori believed that the role of the teacher is to observe the children in action, foster children's innate curiosity, interacting only for the purpose of directing a child towards his or her own natural path of learning.

What is interesting in this short survey are some of the key terms that emerge — receptive, intuitive children are encouraged, their engagement "facilitated," and their curiosity fostered. I am interested in ways which the city, and our architecture and urban interventions, can likewise be built upon these considerations. What if we bring to the foreground the child's perception, rather than the adults'?

REVERSAL PERSPECTIVE

*The child in man is all that's strongest, most receptive,
most open and unpredictable.*

—Karel Appel (*Dutch painter, sculptor and poet*)

Modern artists, writers and architects admired the innocent child and linked childhood positively and nostalgically with primitivism and un-selfconscious expression — the child was endowed with special capabilities that had been deemed lost in the educated and socialized adult. As described by Kazys Varnelis, an American historian and theorist of architecture, in the article, “Education of the Innocent Eye,” to form and develop a language of architecture, newly admitted architecture students are encouraged to abandon any preconception and learn to see with the innocent eye of a child. Varnelis believes it is the “natural, childlike attitude toward space that distinguishes the architect from the typical citizen, hobbled by the obsolete baggage of debased, everyday spatial (mis)perceptions and the burden of history.”⁷

The term “innocent eye” originated in John Ruskin’s (1819-1900) *Elements of Drawing* where he insisted that in order to learn to draw, a student must attain “the innocence of eye; that is to say, a sort of childish perception of these flat stains of colour, merely as such, without consciousness of what they signify.” Ruskin, an English art critic of the Victorian era, believed that culture had obscured nature, and through the artist, nature would be revealed to the viewers again. “A highly accomplished artist has always reduced himself as nearly as possible to this condition of infantile sight.”⁸

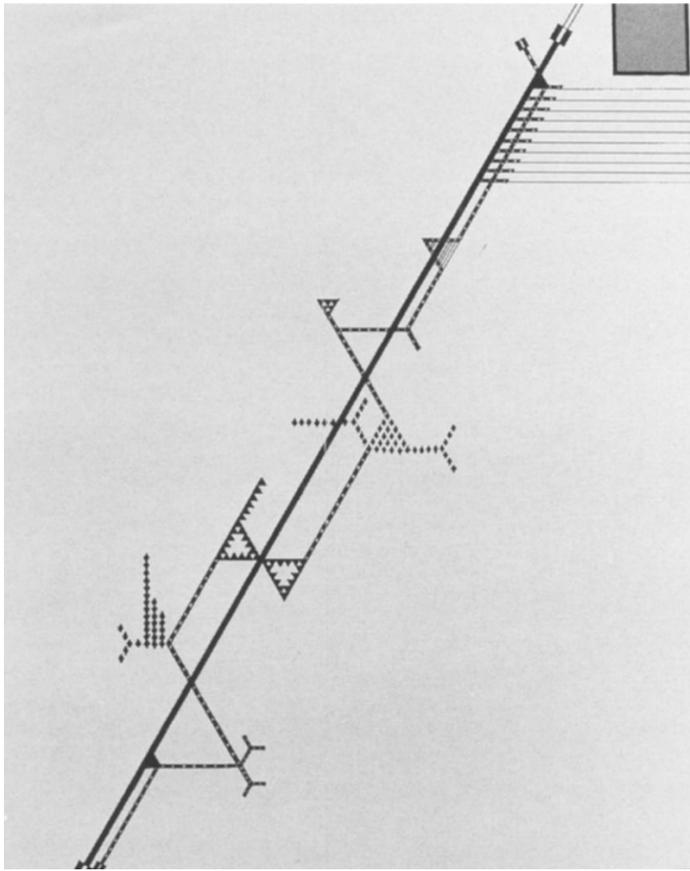


FIGURE 2.2 Frank Lloyd Wright's account of his childhood trek with his uncle through a field of snow.

FRANK LLOYD WRIGHT

The linear pattern is a figurative representation of an episode from architect Frank Lloyd Wright's (1867-1959) childhood illustrated by himself for the cover page of his autobiography. The graphic image is a recount of an occasion when he traverses a field of unblemished snow with his uncle.⁹ The young boy, overwhelmed by curiosity and overjoyed with the expansiveness of the snow, scurries and meanders to and fro gathering plants. The uncle, however, continues on a straight journey without wavering in his path.

Wright's illustration shows a single, diagonal, dark line of heavy weight piercing through the centre of the page, representing his uncle's straightforward motion. The direct path is intertwined with an intricate pattern of lighter-weight, perforated lines representing the Wright's wondrous meandering footsteps across the field. When the duo rejoin at the end of the field, the young boy retraces his steps visually and becomes aware of his uncle's message, "Neither to right nor to left, but straight, is the way." Wright, however, argues against this lesson, a metaphor for the rigid, formal processes of an academic education which he believes eliminates imagination and personal discovery. The reflection illustrates the beauty of the meander, how a child's whimsical movement and desires can alter the perception and activation of space. The appeal of space can often only be uncovered by the free spirit of the child. -



FIGURE 2.3 Magnus and Cora Bischofberger at Andy Warhol's exhibition 'Paintings for Children' at Galerie Bruno Bischofberger, Zurich, 1983

ANDY WARHOL

Andy Warhol (1928-1987), an American pop art artist, exhibited 128 paintings made especially for children at his European dealer Bruno Bischofberger's gallery in Zurich in 1983.¹⁰

The silkscreen paintings of a drumming panda, an airplane, a parrot, a spaceship, a police car, a monkey and a helicopter are imagery Warhol had collected from boxes of vintage and wind-up toys. The art pieces are composed of three bold colours overlaid as though they should be viewed through 3-D glasses. These paintings were also published as a Pop Art board book reminiscent of Warhol's earlier career in late 1950s as a children's book illustrator. The exhibition of Toy Paintings, was a smaller version display that resembles Warhol's 1971 Whitney retrospective. In the 1971 exhibition, electric chairs and Warhol's famous Marilyns painting were shown against wallpaper depicting a field of cows. In Zurich, the cows are substituted for a shoal of fish, which sparkle against a blue background and all swim, mouths open like windsocks, in the same direction. Adults had to squat down to look at the canvases which were hung at eye level for three- to five-year-old children. Adults unaccompanied by a child under six was charged an entry fee, where the money contributed to a children's charity fund.¹¹

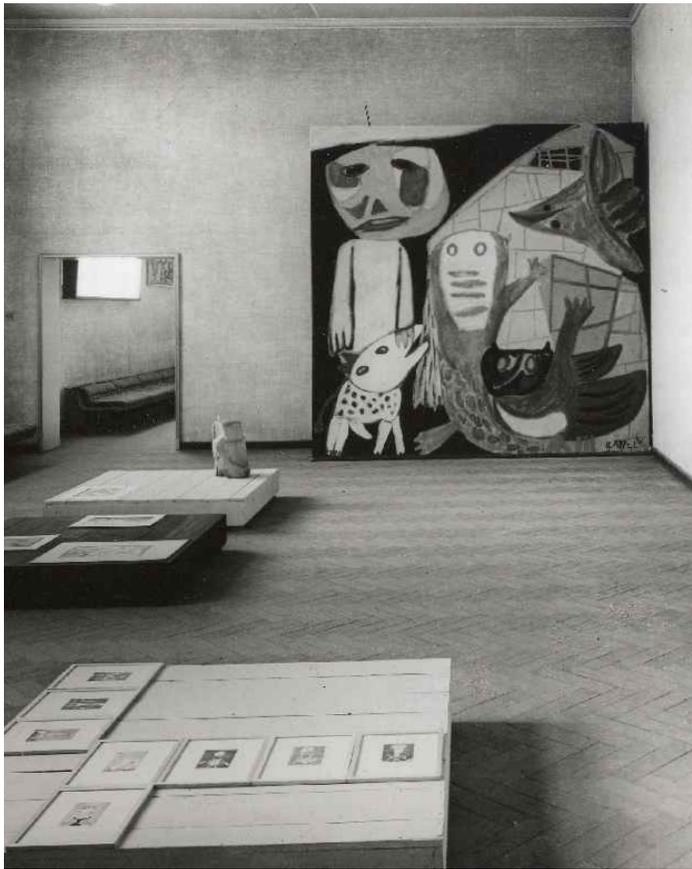


FIGURE 2.4 Cobra exhibition, 1949

COBRA MOVEMENT

The CoBrA group formed by European painters, sculptors and graphic artists, was a short-lived but influential non-conformist art movement which lasted from 1948 to 1951. CoBrA's paintings were composed of vibrant primary colours, child-like imagery and motifs of animal and insect life, as well as hybrid and fantastical creatures. The naivety of the painting elements and child-like imageries offered glimpses of an energetic natural world. The CoBrA collective believed in the spontaneity of the child's imagination untainted by modern protocol and promoted the expressiveness and urgency of the untrained approach in which a child would paint.¹²

The first CoBrA exhibition at the Stedelijk Museum in Amsterdam was designed by Dutch architect Aldo van Eyck. As the CoBrA members had attempted to capture the mindset of children in their art, van Eyck similarly curated the display as though it were designed for an audience of children, putting adults at the same disadvantage as children are usually subjected to in any other gallery or museum. Straying away from conventional display techniques, van Eyck displayed the drawings and prints on low rectangular blocks and incorporated playful design for the exhibition. The canvases were hung at different heights and a few works were set up against the skirting-board of a wall.¹³ Though the CoBrA movement was brief, the conception of designing for children in exhibitions remains crucial in shaping kids-friendly museums. CoBrA's endeavour to confront the world from the perspective of a child remains revelational.



FIGURE 2.5 Children's Holiday Festival, 1957

CHILDREN'S FESTIVAL OF MODERN ART

Victor D'Amico (1905 - 1987), the leader of MoMA's Education Department, was a pioneer in art education, promoting the notion that children were all born with creative talents. The goal of his art programs discouraged imitation in favour of helping children in discovering their own methods of seeing and self-expression.

A notable project organized by D'Amico was the MoMA's annual Children's Festival of Modern Art which lasted from 1942 to 1969. During the event, no adults were allowed into the two gallery spaces, other than the trained teachers. The gallery was built to the scale of children three-to-twelve-years of age and pictures were hung at child's eye level along with equipment designed to suit their comfort and size. One gallery space, the inspiration zone, was filled with toys and art games for the purpose of inspiring and enhancing creativity. The workshops were designed as a mean for exploration rather than as structured lessons. After spending half an hour in the inspiration area, the children then spent an hour in the adjacent workshop with adjustable turntables and numerous art materials at their disposal.¹⁴ The workshops encouraged children to create as their hearts desired, to express freely through art-marking, resulting in an array of colourful art created through observation and activity.



FIGURE 2.6 A 9-year-old using a saw
FIGURE 2.7 Wooden items the students made



RANDALL MUSEUM WOODWORKING WORKSHOP

Many museums have expanded their image from being institutions solely devoted to catalogue and display to places becoming more integrated with their community by offering enlightening and creative art classes and workshops for all ages. Beyond the development of more deft hand-eye coordination, tactile engagement is a critical component in expanding a child's experience and worldview. As a response to handheld electronic devices and advanced technology quickly seeping into our lives, parents are seeking alternatives in enhancing motor skills and manual dexterity for their young children. The Randall Museum in San Francisco has held a children's woodworking program for two decades, but in recent years it has doubled the number of its classes and added one for preschoolers.¹⁵ At the woodworking classes, children are given the opportunity to use power tools to create their own projects including making furniture and toys.

Interacting personally with the objects that form the basis of the world around them, children begin to understand process and possibility. Through the act of building, the component parts of an object like a chair or a bookcase show their history— children begin to see that chair legs or book shelves are shaped from more basic materials, taken from similar raw states and carefully refined to suit very specific purposes. The seemingly conflicting ideas of the malleability and permanence of the world are made directly evident as children feel the resistance of the wood or metal they are working with.

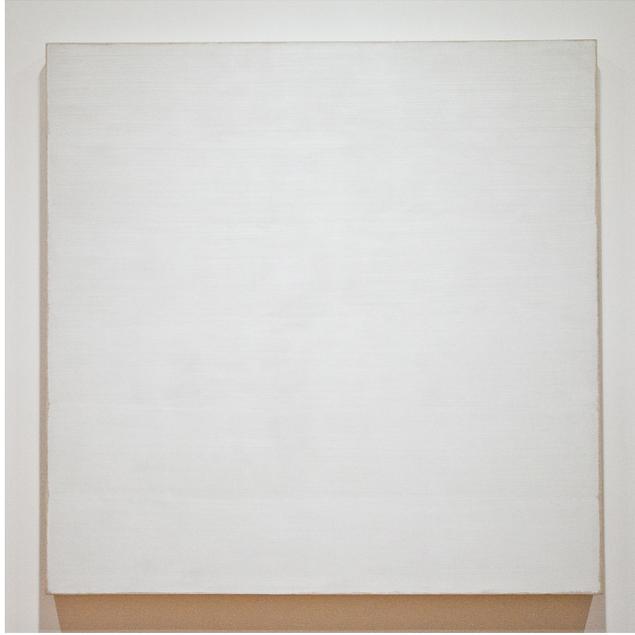


FIGURE 2.8 Robert Ryman, Twin, 1965
FIGURE 2.9 Boy recorder



UNADULTERATED GUIDE

The MoMA 'Unadulterated Guide' pushes the audio guide concept beyond our conventional understanding, relating information not only to children but from their own perspective. MoMA Unadulterated is an audio guide created by children aged three to ten. The project attempts to shift perspectives on 30 pieces of the museum's permanent collection by enlivening the experience with children's curious and unfiltered analysis. The audio clippings are filled with unique and unbiased thoughts ranging from what each piece of art looks like, to what the story behind the piece could be, to the deeper meaning of art. Without the preconceived notion of monetary or status association, children are able to express their opinion freely. The commentary is imaginative and often diverges on wild tangents by the end of each clip. For instance, commenting on Robert Ryman's piece, *Twin*, one child has a quizzical response, "that doesn't look like anything to me," another child chimes in with the response that the art piece is the "blankest piece of paper." Another boy suggests "I'd sell it for one dollar," followed by another child's interjection, "I'd sell it for one cent!" The incoherent and unscripted response reflects children's attempt in making sense of the convoluted and complex adult world.¹⁶



FIGURE 2.10 Barnens Konstmuseum
FIGURE 2.11 Interior of the Barnens Konstmuseum



BARNENS KONSTMUSEUM

A mini art gallery is created for children by Swedish creative studio Medium and artist Jacob Dahlgren. The Barnens Konstmuseum (Children's Art Museum) is located in the Västerås Konstmuseum in Sweden. The installation resembles a doll house, where all the components are scaled down for children. The exhibition of work is called "Ett Rum Fyllt Med Idéer", *A Room Filled With Ideas*, by artist Stefan Edqvist where the art pieces are bright in colour, sized corresponding to children's scale, and oriented at children's eye level.¹⁴ Children engage directly with the artwork, unself-consciously prodding, feeling or even nestling into the pieces — a rare sighting in museums where viewers are often discouraged and reminded to remain a certain distance and not to touch artwork for fear of potential risk in damaging the art pieces.¹⁷



FIGURE 2.12 Wonderland project
FIGURE 2.13 Child's Own Studio plush



WONDERLAND & CHILD'S OWN STUDIO

Wonderland is a project conceived by Korean artist Yeondoo Jung, in which children's fantasies are rendered into photographic reality. Intrigued by the power of a child's imagination and ability to refigure memory and real imagery into unreasonable and unexpected expressions. Children's unbounded make-believes spring from their flexible interpretations of the adult conventions, swaying our values and beliefs. Jung devised a project to bridge the dimensionless fantastical world with the physical existence — *unrealistic matter within a material designed to show reality*. Jung oversaw art classes in four kindergartens in Seoul and collected 1,200 drawings by children between the ages of five and seven. He selected 17 drawings and recruited 60 high school students to act out the scenarios in the children's drawings. Similar to Yeondoo Jung's Wonderland project, Wendy Tsao, a Vancouver-based artist has a studio devoted to creating soft plush dolls made from children's drawings. The seemingly simple and whimsical drawings are brought to life. The dolls are a reflection of the young creators' identities, contrasting with ubiquitous commercial play objects.¹⁸



FIGURE 2.14 Wooden room in the nursery
FIGURE 2.15 Kids playing in a dwelling



KIDDY SHONAN C/X NURSERY SCHOOL

Designed by Japanese architecture firm Suppose Design Office, Kiddy Shonan C/X Nursery is located in Kanagawa, Japan. The project features scaled down archetypal houses in the interior area of the school. These separate dwellings break down the space into more manageable and intimate zones, creating a village-like feel where children are welcomed to venture and explore.²⁰ The houses are finished in drywall, wood or brick, and in different colours, creating a diversified learning environment that adds visual cues and enhances the children's sense of touch. Children run around the miniature city, follow or hop over the painted white lines on the floor, climb into and jump out of buildings through low window openings. The varying window cut-outs are carefully placed to connect spaces and extend visibility amongst the rooms.



FIGURE 2.16 Exterior view of the library
FIGURE 2.17 Rooftop functions as slide



THE PINCH

John Lin and Olivier Ottevaere led a team from the University of Hong Kong to design The Pinch, a library and community centre built as part of government reconstruction projects following the 2012 Yunnan earthquakes. The library sits adjacent to a 4 meter high retaining wall. The design straddles the level changes and acts as a bridge between the rebuilt village and the new memorial plaza. The profile of each roof truss shifts across the length of the building to create both a gradual incline to bring people down and a sharp upward pitch in order to elevate the roof and bring more light in. The trusses extend downward in the interior to support a floating bookshelf. Simple traditional school benches are used for flexible seating arrangements. The building fosters community engagement and is constantly used by children: the roof as a slide, and the trusses as climbing structure.²¹



FIGURE 2.18 Aerial view of Fuji Kindergarten
FIGURE 2.19 Classroom seen from central courtyard



FUJI KINDERGARTEN

Fuji Kindergarten, located in Tachikawa, Japan, is designed by Tezuka Architects. The school, in the shape of an oval with perimeter of 183 metres, features as a broad, elliptical ring of varying widths, enclosing an outdoor area for exercise, assembly and other general activities. The roofscape connected to the ground floor by means of stairs and slides acts as an extension of the central playground and courtyard. The edge of the roof doubles as a balcony, providing seating space for viewing activities below. The building boasts an open plan where students are encouraged to roam freely. The classrooms open on to the central courtyard with floor to ceiling sliding glass panels, and are distinguished by open-air passages and bathrooms. Furniture defines the internal arrangement of the classrooms, and all the spaces are designed with regard to the children's shorter proportions. Three large, existing zelkova trees and numerous rooflights punctuate the cherry-wood deck. The school students enjoy climbing on the trees which are surrounded by nets as safety measure to prevent children from falling through the gaps. Ceilings float only 2.1 m (6.9 ft) above the ground to create a more intimate atmosphere for the children and allow for people from the courtyard to have an easier and more direct view of the activities happening on the rooftop.²²

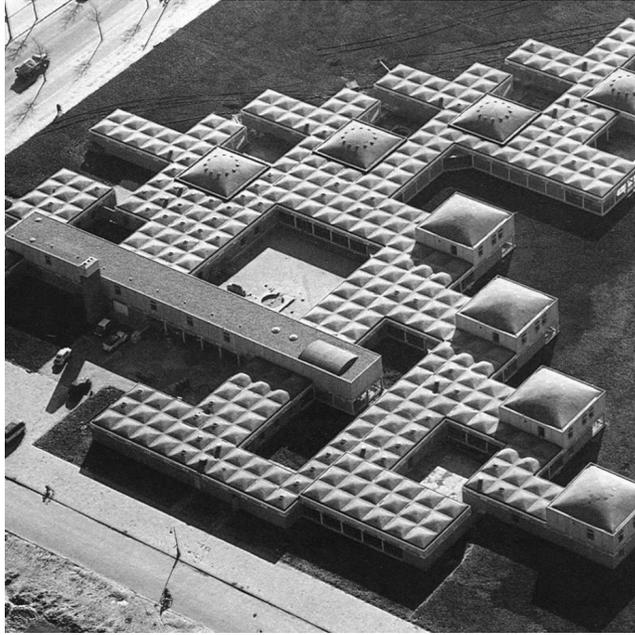
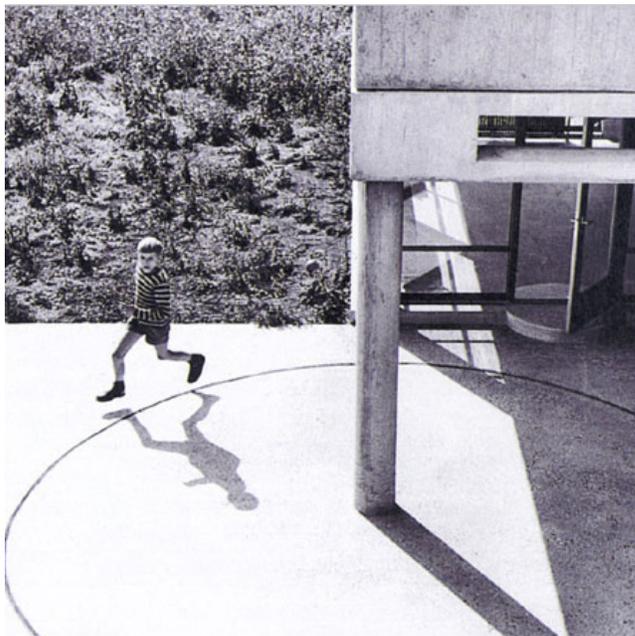


FIGURE 2.20 Overall view of the orphanage
FIGURE 2.21 Child in the orphanage courtyard



AMSTERDAM ORPHANAGE

Aldo van Eyck's design for the Amsterdam Municipal Orphanage focused on a balance of forces to create both a home and small city on the outskirts of Amsterdam. Van Eyck created a decentralized urban structure with many nodal points of interaction and built a new order, based on the idea that a city is a large residence and a residence is small city. Van Eyck was interested in a nonhierarchical development of cities and in the Amsterdam Orphanage he created a building with many in-between conditions to break down the hierarchy of spaces. Van Eyck sought to realize spaces and places whose cohesion lies in their reciprocal relations, not in their subjection to a higher principle.²³ What he thus aimed for is not an isotropic universe of equal repetitive types but a complex unity of different places, a form of unity in diversity.

The series of artistic precedents highlight methods to engage the creative and physical world of children through imaginative as well as spatial means. These artistic installations range from shifts in height, scale, perceptions, to direct invitation for interaction under the framework of intervention or museum, encouraging children to become the active agents that blur boundaries in our cities — they engage with challenges through play and joy. In the following section, this idea is explored beyond the bounds of institutions.

CITY AND

CHILDREN



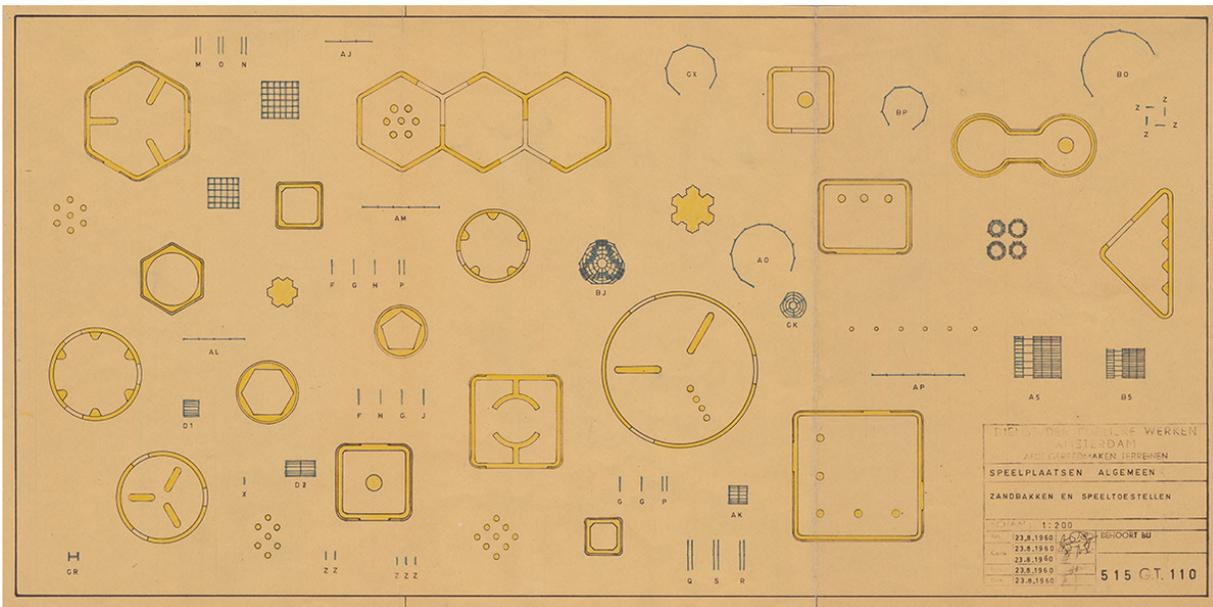


FIGURE 3.2 Aldo van Eyck's drawing of sandpits, somersault frames, climbing frames, play tables, and climbing mountains. 1960

Aldo van Eyck (1918-1999), a Dutch architect, was a core member of Team X. The establishment of Team X, composed of architects from the Congrès Internationaux d'Architecture Moderne (CIAM), in July 1953, was a result of members' frustrations with dogmatic, modern approaches to urbanism. Team X sought a new method to restore playfulness to modern architecture. "Functionalism has killed creativity," van Eyck stated in an article in the Dutch magazine *Forum*, "it leads to a cold technocracy, in which the human aspect is forgotten. A building is more than the sum of its functions; architecture has to facilitate human activity and promote social interaction."¹ Team X instead proposed *structuralism*, an ideology focused on the engagement between users and architecture, where open-ended building structures were constructed by the repeated use of basic elements. Van Eyck deployed this method in post-war revitalization projects as he was commissioned to design over 700 playgrounds in Amsterdam, Netherlands. The playgrounds acted as an experimental ground for van Eyck, where he could test out his theory concerning the 'in-between' realm where different elements can meet and unite, or more specifically as "the common ground where conflicting polarities can again become twin phenomena."² The twin phenomenon, an original concept of van Eyck's, stems from the insight that conflicting polarities (such as unity and diversity, part and whole, subject and object, inner and outer reality, small and large, open and closed, movement and rest) are not to be considered as absolute or mutually exclusive entities. Instead, these opposites should be considered as distinctive components, two complementary halves of one and the same entity; conversely a true entity is always twofold. This concept is van Eyck's interpretation of relativity, connecting two complementary opposites attune to the correct level of tension so as to achieve equilibrium, a non-hierachic, purely reciprocal relation.

Take off your shoes and walk along the beach through the ocean's last thin sheet of water gliding landwards and seawards. You feel reconciled in a way you would not feel if there were a forced dialogue between you and either one or the other of these great phenomena. For here, in between land and ocean — in this in-between realm, something happens to you that is quite different from the seaman's alternating nostalgia. No landward yearning from the sea, no seaward yearning from the land. No yearning for the alternative — no escape from one into the other. You coincide with both, because their coincidence is you. Now there's nothing wrong with the sailor's nostalgia as long as we realize that he's always wanting to go home both ways. What we need is to be at home - wherever we are. As long as home is perpetually somewhere else, there will be no question of 'belonging'. We'll not be participating but eavesdropping. Architecture need do no more than assist man's 'homecoming'.

— Aldo van Eyck, *The Child the City and the Artist*

In the passage on the overleaf, van Eyck illustrated humanity's natural affinity toward the in-between spaces, the urge to occupy delineated spaces, regardless of the nature of boundary, whether it be a prescribed division like a fence, or a transition between land and ocean. However, in dense cities, where structures dominate the urban built form, how does one find balance in the reconciliation for contrary tendencies?



FIGURE 3.3 Red Ball Project in Paris

Two recent art installations that draw attention to the in-between spaces are the Red Ball Project by Kurt Perschke and Azkelon by Sigalit Landau. The Red Ball Project idea is simple: a 15-foot high inflatable ball constructed of pvc fabric is inflated in an unexpected location and left to distract and invite curiosity from passersby. The site options for the ball are almost limitless — Perschke has lodged it between two buildings, constricted it beneath bridges or inside pavilions, hung it from cables, and squeezed it inside a bus shelter. Perschke has described that, “on the surface, the experience seems to be about the ball itself as an object, but the true power of the project is what it can create for those who experience it. It opens a doorway to imagine ‘what if ...?’”³ The alien nature of the ball draws attention to unnoticed places and highlights overlooked landmarks. Perschke recounted that as the ball made its journey around the world, people often approached him on the street and suggested places for the ball to be situated in their city. In that moment, the citizen no longer remained a neutral spectator but transformed into a participant in the act of imagination. Regardless of the different continents, cultures, languages and diverse age ranges, people were all eager to invite and integrate the ball into their cities.

Israeli artist Sigalit Landau similarly explores the notion of shifting views of boundary. In one of her pieces, she worked to illustrate tensions between opposing forces in the politically fraught region of Palestine/Israel. Aza, an area now more commonly known as the Gaza Strip, is one of the most crowded districts in the world and is populated by Palestinian refugees. The adjacent settlement of Ashkelon was established by Jewish immigrants from Arab countries. The title of the art piece by artist Sigalit Landau is derived as a hybrid of these two places, resulting in the word Azkelon. Azkelon is a video showcasing three teens playing a knife game on the beach where the border of Aza and Ashkelon is marked.⁴ The game reflects Israel’s continually shifting



FIGURE 3.4 Three teenagers playing a knife game

borders, and it turns the struggle into an interactive exchange through a children's game of borders in the sand. The video begins with three teenagers gathering and drawing three lines diverging equidistantly from the centre to the edge of the frame with their knives. As they begin to take turn throwing their knives and retracing their sections, the boundaries are continually shifted and their territories readjusted. The game makes evident a means of communication where, through play, a safe place is provided for interaction and negotiation, opening a medium to relate to reality.

In the severely bomb-damaged East End of London around 1950, photographer Nigel Henderson along with his wife, Judith Stephen, who was an anthropologist conducting a study on working-class lifestyle, documented children's negotiation of their dilapidated surroundings through play. The couple was intrigued by children's ability to make "unexpected connections between the contingent aspects of their surroundings, and to humanize their environment through new patterns of association." Architects Peter and Alison Smithson were subsequently inspired by Henderson's photographs, and in 1953, they collaborated with other young artists, architects, filmmakers, and writers on an influential visual statement of the Smithsons' new approach to urban planning, titled "Urban Re-identification"⁵, in order to challenge the modernist dogma of rationalized cities with their segregated and separate functions. The exhibit, presented at the ninth CIAM gathering was laid out as a grid, featuring Henderson's photos that represented the Smithsons' guiding principle of "human association." The photographs in-turn informed a mapping of interconnected layers of urban experience — from "house" to "street", and "district" to "city".

The force, or link, that supported the Smithsons' guiding principle of social connectivity was the children at play; the children

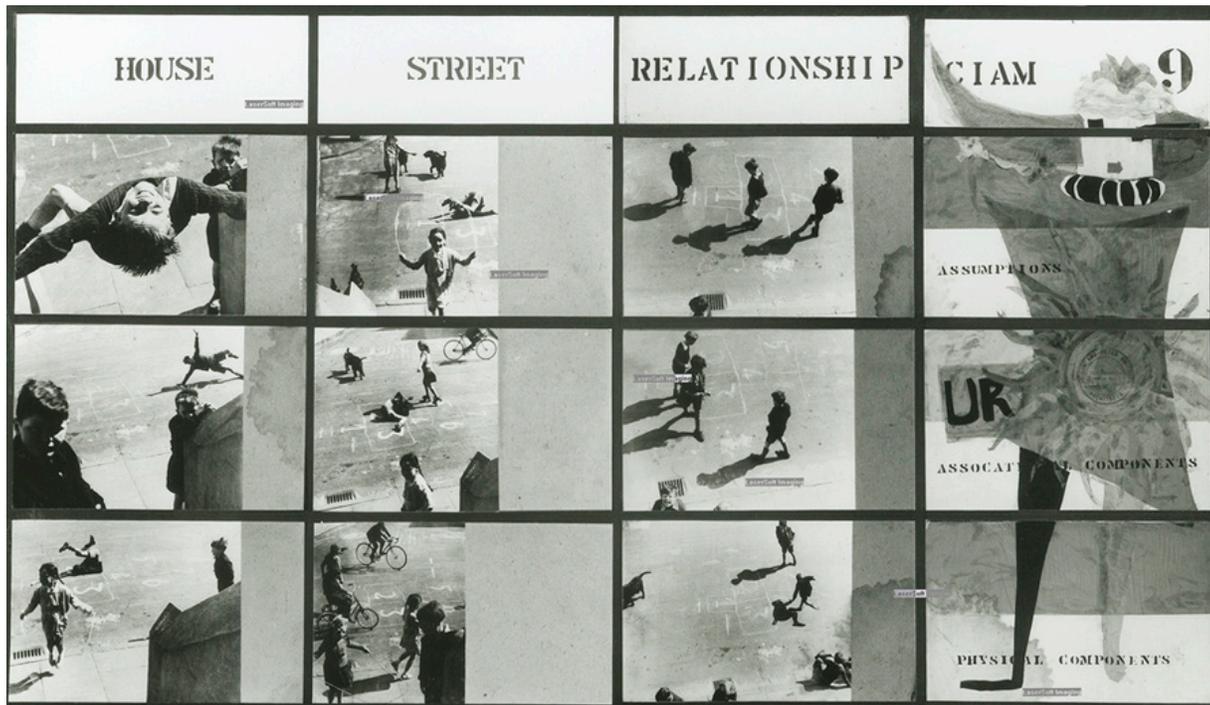


FIGURE 3.5 Alison and Peter Smithson's Urban Re-identification Grid, 1953

who played on the street embodied social cohesion and created spatial connections acting as a potential force to form new “clusters”, the underpinning concept of a “cluster city” proposed by the Smithsons. The term “cluster” is used to avoid association with the concept of the “street”, a place that the Smithsons felt was outdated, since the use of cars prevents the street from being a place for a resident to identify with their environment.⁶ The overprescribed city in the Smithsons’ opinion, threatened to create sterile spaces devoid of community spirit. As observed by the Smithsons, in children’s play the intuitive unfolding of spatial relationships becomes the basis for a new approach in conceptualizing environments, generating a new architecture and urban design strategy opposed to the prevailing modernist orthodoxy of the rational or zoned city.

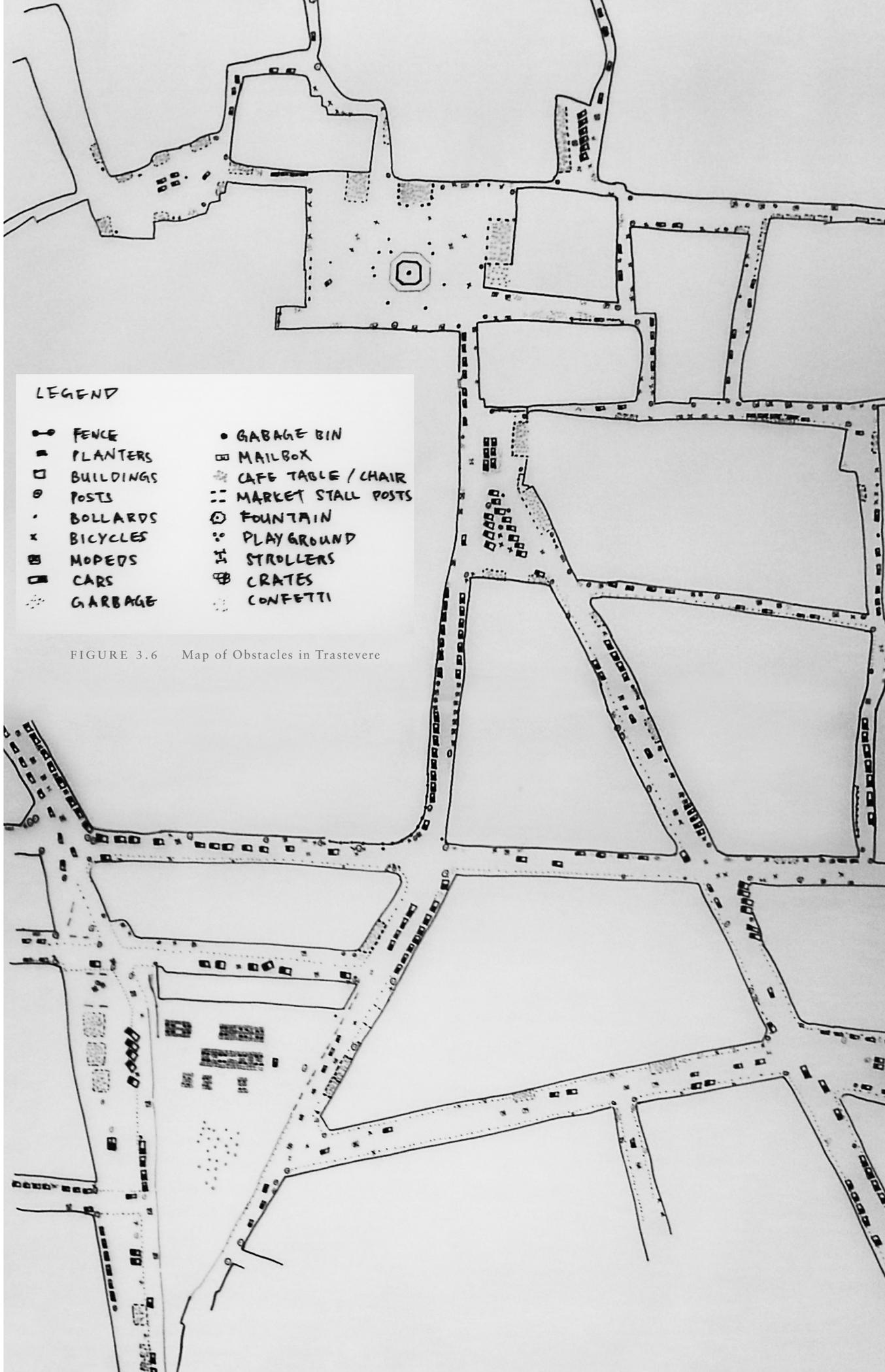
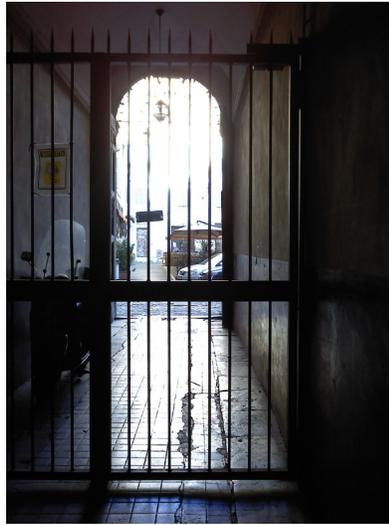


FIGURE 3.6 Map of Obstacles in Trastevere

child vs ADULT

An exploration of the environment viewed at two vantage points.

The maps that adults are most familiar with are of open streets where roads connect or feed into another, street names and building purposes are meticulously labelled, public and social spaces are allocated. The ‘map’ is used to provide a general view of the city for the purpose of navigation. In contrast, the map to the left documents obstacles perceived by children as they move through the city. An attempt was made to distinguish objects in the public realm where the world organized for adults appears mundane and cluttered from a child’s perspective. I wandered the neighbourhood of Trastevere in Rome, trying to re-capture the everyday objects I was familiar with from a new perspective. One of the first things I noticed is that children’s depth of view is constrained by the ground plane— at less than four feet tall, they are more attuned to (or familiar with) the floor and, like all of us, more absorbed by objects that are closer to their reach. For instance the fresh fruits and vegetables at the market are beyond their range of sight, only the stacks of disorganized crates can be seen. The children cannot see over cars, tables or garbage cans so these objects loom as obstacles; the beauty of greenery is diminished as the children are confronted more immediately with the planter instead of the plants. Children interact with the support systems, such as the table or chair legs, that we use to organize the world we, as adults, operate in. For adults, boundaries in the public realm are created by fences, gates, or walls, but for a child, objects are expanded in their complexity and relative size, creating increased limitations on their maneuverability. The diagram shown to the left depicts a child’s world cluttered with these obstacles, making a confusion of streets and plazas.

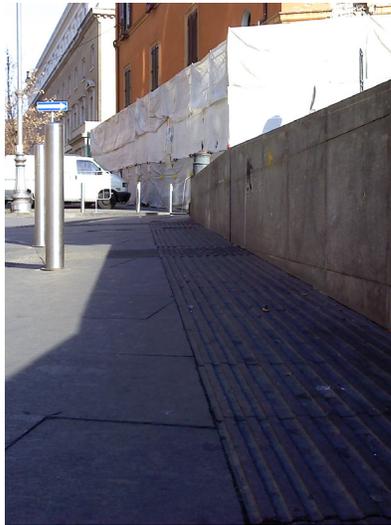


Considering the ways children perceived the city, I conducted another quick experiment in Trastevere. Through a simple collection of photographs, one set taken from an adult's eye level, the other from a child's line of vision, I began to conceive how the elements of a city present differently to the adult than to the child. One of the issues that immediately became obvious was the way in which most of our urban furniture presents as an obstacle — or possibly a playful challenge — to a child.

The series of eighteen photographs is composed of paired images taken from two different vantage points: one photo (on the left) taken at 70cm to resemble a child's view point, while the other image (on the right) is taken at 150cm from an adult's eye level. Elements in the adult world which are deemed inconsequential increase in significance in a child's world due to the scale of the object relative to the size of the child. These objects include bollards, benches, market stalls, planters, mailboxes, garbage bins, chairs, fences, and fountains. Viewing the world from 70cm or lower, makes everything appear larger and more elaborate. Benches and bollards which appear as pins and planes to us loom like walls and monoliths to children; the patterns and dirt of ground plane surface treatments reveal their detailed complexity.

- FIGURE 3.7 [p.77 top] Garbage can
FIGURE 3.8 [p.77 centre] Entrance gate
FIGURE 3.9 [p.77 bottom] Market stalls
- FIGURE 3.10 [p.79 top] Flower pot
FIGURE 3.11 [p.79 centre] Mailbox
FIGURE 3.12 [p.79 bottom] Chair
- FIGURE 3.13 [p.80 top] Fountain
FIGURE 3.14 [p.80 centre] Bollards
FIGURE 3.15 [p.80 bottom] Benches





The world of childhood is, spatially speaking, a low-down world. It is easy to forget that, as adults, we inhabit the upper air. It is easy to forget that for the child, the landscape is populated by legs and feet, shoes and boots, the bottom half of everything.⁷

—Gary Michael Dault, *Children in Photography*

Children learn about the world through sensory recognition and empirical cues, yet adults rely primarily on preconceived notions and past experiences. The mapping and photography exercise attempted to address and link the gap between the world of adults and children. After grappling with how children inhabit the physical environment of the city that I live in, I also began delving into the ways in which children inspired or initiated movements that directly arose in and impacted the streets.



FIGURE 3.16 - 3.21 Dutch children protesting for a play street

In a 1972 documentary film by Dutch filmmaker Roeland Kerbosch showcased children's efforts in fighting for open spaces to play in, in an automobile-dominated world in the neighbourhood of De Pijp in Amsterdam, Netherlands. Located south of the city centre, at the time when the documentary was filmed, De Pijp had a population of over 40,000 people living within a 120 hectare area resulting in a population density five times greater than the Amsterdam average but with far fewer of the old city's amenities such as parks and canals.

Children from the neighbourhood devised the idea of a play street where the road would be barricaded to prevent automobile traffic. Roland Dam, a young boy from the community, informed the documentarians of play-space concept developed from a class discussion, fuelled by the desire to improve the city they live in.⁸ As more children joined the campaign, hopeful of gaining a space to call their own, they began to win over sympathetic adults as well, nostalgic for a childhood where they were safe to roam the streets without the worry of vehicles. Regardless of the positive feedback, some adults remained unwavering in resistance to the proposal. One man uttered in disbelief, "Impossible! You cannot ever close a street! Out of the question!" While a driver responded by repeatedly clearing the barrier out of the way of his car, resulting in a physical confrontation with other adult protesters. Despite the challenges faced in persuading drivers to shift their perspectives, Roland insisted, "We occupied the streets to show that we want a play street. It needs to be closed for ever. That's how you campaign! Show what's wrong and how it can be better. And then the city will follow." Near the end of the documentary, the children had garnered substantial attention and even the city councillor, Han Lammers, was involved. Though the councillor was evasive in promising a play street immediately during his discussion with the children, the impromptu play street supported by local citizens remained.



FIGURE 3.22 Students making model
FIGURE 3.23 Student presenting his work



Forty years later, in Toronto, middle-school students have been given the chance to become leaders and agents of change within their neighbourhoods through the facilitation of a civic design workshop called *Imagining My Sustainable City*. *Imagining My Sustainable City* is a collaborative initiative between the arts organization No.9 Contemporary Art and the Environment and the Toronto District School Board, where one grade 7 class from each of Toronto's 44 wards is selected to partake in a design exploration of their neighbourhood. Participants in the four-day program are invited to envision their neighbourhood as a sustainable hub within the city. Working closely with architectural educators, students are encouraged to explore, observe, and document qualities of their community by examining existing conditions: transportation, waste management, building types, green spaces, water management, energy use, and resources. As each community faces distinctive challenges, ranging across environmental, social, transportation and infrastructural issues, the architectural educators assist to articulate the students' visions and direct them to consider how to positively impact their neighbourhood while preserving its unique characteristics. The pupils are encouraged to be ambitious, to propose both realistic and innovative alternatives.

The first day of the workshop consists of a neighbourhood walk, scoping out the vicinity to discover all the idiosyncrasies that make up the community. The city of Toronto is then reconstructed through the eye of the students by means of sketching and brainstorming ideas that could improve or strengthen the site and its surrounding area. On the following day, a simple cardboard building exercise is introduced to develop student's spatial understanding and help them articulate their relationship to their surroundings. Each student is given 6 pieces of pre-cut cardboard in squares and rectangles to build a structure which they are encouraged to reshape, bend, and cut to explore their ideas. The



FIGURE 3.24 End of year presentation
FIGURE 3.25 Aerial view of models



third day is when chaos ensues—though exciting with all the imaginative ideas filling the room as the student brainstorms ideas for the site together, the day is also challenging with students burning their palms with hot glue guns or nearly slicing their fingers with modeling blades. Regardless, as the students work at model-making they collaborate and create intricate proposals. On the last day, the 1:100 model is completed and the students proceed to prepare for an oral presentation where they reflect on the previous days and share ideas and experiences with their fellow schoolmates. Each participating class is given the opportunity to present their work to their principals, other teachers and schoolmates, and sometimes to the city councillors.

A few projects designed by students have impacted the community positively, where the ideas proposed are moving beyond cardboard models to take shape in real life. Supported by their city councillors, a farmer's market designed by students at Pierre Laporte Middle School will be realized in a few years.⁹ Another example was recorded in a CBC interview conducted by Matt Galloway with Barbara Lilker, one of the architectural educators, and Parveen, a student from Dixon Grove School.¹⁰ Parveen described the problem faced by her peers: "the schoolyard is dull, and nothing [is] pulling us together." For her, the solution was to revitalize the school with a garden, seating, cricket pitch, and greenhouse, "not only the students will be in school, but the community will be in the school after hours or in the summer... not only bringing us [students] together, but the community...we will become one big happy family". Galloway probed the student on the implication of having people gathered together: Parveen replied, "You would feel more safe, so if you see everyone more often, you'd feel more comfortable with them, and you'd feel more safe in your own area." Not long after, the principal of the school organized a fund raising event to support the students' design proposal, seeking donations to be used for

the construction of a seating area, play space, and community garden.

At one particular school, Farimount Public School, the students were eager to extend further exploration of the design concepts after the workshop had ended. The theme of sustainability and urban planning were further developed within the class curriculum as students created digital representations of their models using 3D sketching programs, positioned their models on Google Earth, and studied the feasibility of constructing the proposed structures on the Scarborough Bluffs, a geologically sensitive site. The exploration culminated in the students writing research papers integrating a wide-range of disciplines and evaluating possible solutions to local and global environmental issues. During the process, students gained a deeper understanding of how to improve their neighbourhood through imaginative proposals, as well as means of challenging the status quo. Collectively, the students' visions for the city of Toronto lead to discussions of civic engagement, governance and living a sustainable lifestyle.

These experiments and research—the mappings of Rome, the historical activism of children in Amsterdam, and the involvement with Toronto's youth—were only the beginning of my own education: Through what means can we transform the city? What are the spaces—whether defined or undefined, built-up or left-over, fenced or unbounded, ephemeral or durable—that bear opportunities for a more visible and active presence of children in the city?

DE-

FENCE



The word *fence* is an aphetic form of defence, from Old French *defens*, or late Latin *defensum*. The primary usage of the word fence began in the early fourteenth century, denoting the action of warding off unwanted subjects or resisting the attack of an enemy. The definition of the word evolved to signify enclosure in sixteenth century and to describe action relating to the arrangement of protection, whether of self, or of another entity. In the eighteenth century, the meaning of *fence* came to refer idiomatically to a dealer or receiver of stolen goods, as such transactions took place under defense of secrecy. Around the same time, the word *fence* began to take on figurative meaning, such as ‘*mending one’s fences*’ and ‘*on the fence*’ where the first phrase indicates re-establishing friendly relations with someone and the latter phrase used to describe unwillingness to commit oneself to one side of an argument or another.¹

Many fences have been erected indiscriminately, a result, primarily, of our society’s preoccupation with safety. The fence serves to protect but divides and disengages at the same time. Recognizing how children engage with space is crucial in enabling children to understand the city in their own terms, at a slower speed, with more sensorial instincts, and more emphasis on the in-between zones. The vulnerability of children must be taken into consideration, but our response cannot be limited only to establishing harsh boundaries, deterring children from making their own interpretation of their surroundings. Rather than cut short children’s opportunity to explore we must first understand how they engage with their environment.

CHALLENGING BOUNDARIES

(CITY OBJECTS RE-APPROPRIATED BY CHILDREN)

The following stories represent a selection of observed case studies that challenge established boundaries and let us glimpse a renewed integration of child's play in the city. The anecdotes are an exploration of how children's curiosity morphs their surroundings, contrasting with adults' inflexibility in perceiving alternative potential uses for ordinary objects.



FIGURE 4.2 Tree-climbing

06.24.2014

I heard the rustling of branches. At first I thought the sound was caused by a gust of wind, but looking more carefully at the tree, I saw five children spread out on the branches. They had leaned one end of a hydro wire spool against the trunk and were clambering around the tree, each claiming a different limb as their own. As their play continued, they began pointing out new, interesting or more difficult branches and helping each other figure out how to make their way around.

Just a few metres away, a purpose built playground lay empty, completely overshadowed by the simple, organic adventure of climbing a tree. The prescriptive actions of the swings and slides somehow appeared dull in comparison to the myriad options of interactions and exploration available in the branches of the tree.



FIGURE 4.3 A balancing act

07.21.2014

On my route back from the library, I found myself at a large, manicured square. Across the sprawling green lawn, on the other side of the park from a newly installed playground, a concrete wall rose out of the ground to display the name of the park. Again, the designated play structures sat empty. The focus of the children here was instead on the park sign—its subtle curve becoming a playful opportunity. The simple gesture in the landscape invited imaginary play, offering the exhilarating feeling of climbing higher and surpassing the guardian's height. A toddler with his mom nearby saw this girl's balancing feat on the concrete and was eager to follow, perhaps looking forward to the day when he would be taller than his mother.



FIGURE 4.4 Scaffolding playground

06.26.2013

The flux of city life —the construction, the renovation, the reorganization—creates the requirement for temporary scaffolding both to support the work and the workers involved, and to protect the passersby. The fear of structural collapse or of heavy objects plummeting from work going on above is intensified by the perceived frailty of the scaffolding and the tenuousness of the cranes and wires moving materials and equipment around site. Perhaps due to the limited space and fear of danger, one is prompted to walk faster, as if passing through a tunnel, being drawn by the light at the end, or more literally, the relief of exiting an unsafe area.

One afternoon, I had hopped off my bike on College Street near Spadina Avenue. Due to construction, the few bike posts that were once in the area had been ripped out. With the hope of finding one on a larger street, I walked towards Spadina Avenue, reluctantly though, as I would need to pass through a pedestrian lane underneath scaffolding with my bike. For some reason, traffic through the passage was being held up; I glanced ahead and saw a little boy, around age 7, climbing the metal scaffolding structure. One foot rested on a horizontal bar, as the other moved toward the centre of two crossed bars. The boy's dad held on to his upper arms as a precaution. When the father suddenly realized that his son had slowed down the incoming flow of pedestrian traffic he began attempting to pull the boy away from the scaffolding. The boy was fixated on his newly improvised game and was obviously reluctant to leave, holding on even tighter to the structure. With firm parental insistence, the father cajoled the boy, the game ended, and the pedestrians all shuffled by.



FIGURE 4.5 Space awaiting for echoes

04.23.2014

As spring returned to the city and the cold weather receded, the sun started to penetrate through Toronto's grey skies, luring winter-hardened citizens to wander outdoors. Though the breeze remained cool, the streets were bustling with activity. I walked on College Street in the late afternoon and noticed how cheerful people had become on this particularly sunny day. Amidst all the movements on the sidewalk, I spotted three little kids in their puffy, pastel-coloured snowsuits, who ran towards and then past me, only to halt somewhere just outside my peripheral vision. I turned around to check out the cause of the urgency and excitement and saw that the three girls had planted themselves side by side, crouching over a steel grate in front of a store. The three girls simultaneously began talking and singing down into the dark hollow and giggled with delight at hearing their own echo reflecting back to them.



FIGURE 4.6 Flag pole as climb structure

06.05.2014

During a post-meal stroll around the neighbourhood, I walked down the laneway next to my house to the elementary school a few streets away. Generally, I linger around the north end of the school, where the playground, grass field, and track are located, but this time I ventured to the front of the school, where the main entrance is located. This area has no play structure and is usually devoid of any activity. I noticed two people, a father and daughter, discussing a plan next to a thin white flagpole. After watching for a minute or two, I discerned that the father was helping his daughter figure out how to climb up the post. The daughter seemed to be around age 9 and was the one that initially expressed interest in the undertaking. And yet she was timid to start. The father patiently encouraged her, brainstorming together about how they could collaborate to get her up the pole. He kept his assistance to a minimum, taking joy in watching her agility and determination. As I passed by, I could see him slowly inching her higher and higher.

STREET AS OPEN CANVAS

(PLAYING IN THE STREET)

Streets are rarely seen as anything beyond a means of transit from one location to another. The fissures and bumps in the asphalt are inconveniences, the water running in the curbside gutters and puddling in dips are hazards to avoid, lane markings and crosswalks define rules of manoeuvring; the expanse of pavement is a surface for negotiating traffic.

The following anecdotes are an exploration of how children's curiosity transforms their surroundings, contrasting with adults' task- and destination-oriented perception of their life on the move. Children's appropriation of streets, challenges the notion that they are simply conduits and not a critical field upon which to foster social engagement.



FIGURE 4.7 Mulberry splatters

06.22.2013

My office space is on the second floor with a window facing the laneway. The window has a translucent screen allowing a gauzy view of movement in the alley. Mulberry tree branches sway softly in the wind, casting delicate shadows on the screen fabric. One late afternoon, with my window open, I could hear a father and his young daughter conversing. From the sound of her voice, I'd guess the little girl was 3 or 4 years old. Stopping in the middle of the laneway, she stood still and stared down, completely engrossed in the purplish-red colour spread on the asphalt. She asked her father what the pattern was and how it was formed, exploring the spots and scuffing the ground with her feet. The father, eager to move on with their journey, tersely explained how the spots had been created by mulberries falling from the trees and splattering on the ground. But the child remained fascinated; each time she stepped on an unsquished mulberry, creating new, tiny imprints on the ground, she would squeal with joy.



FIGURE 4.8 Branches tug-o-war

06.17.2013

The rustling sound of the leaves and high pitched voices seized my tired attention. The sounds I generally hear on the laneway are limited to occasional dog barks, imperceptible chatter and infuriating car honks. Curious about the unfamiliar ruckus, I peered up the alley. To my surprise, one boy was running with a long branch held tightly in his hands, while two of his playmates chased after him. The pair in pursuit quickly caught up to the boy with the tree branch, and began pulling on the limbs to gain possession. A spontaneous game of tug-o-war ensued.

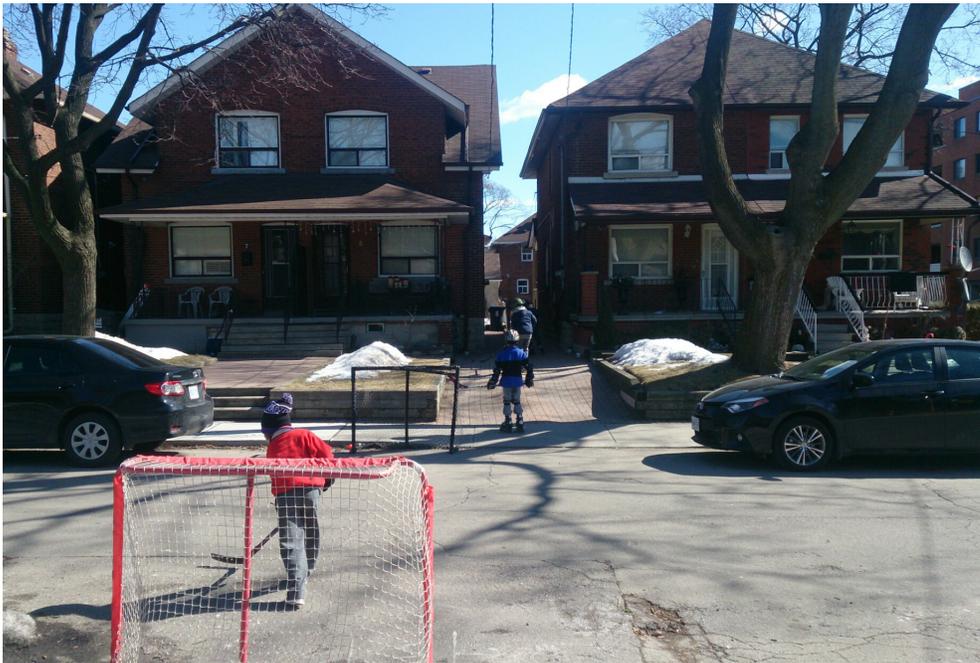


FIGURE 4.9 Street hockey

03.14.2015

Signs dot my neighbourhood, appearing at intersections and in alleyways: “Ball and Hockey Playing Prohibited - By-Law 522-78”. These quiet streets are not meant for play, ease of traffic movement is the priority. So I was surprised, one day, to come across a group of kids blatantly flaunting the law. They had positioned their nets on opposite sides of the street, encroaching on sought after parking spaces. I watched for a while as they stick-handled the ball, chasing it across yards and under parked cars when they missed the net. They yelled for passes and cheered their goals. Their actions seemed carefree and yet they were obviously mindful of cars as they approached, slowly crossed the ‘rink’, and then sped away. I imagined a time before By-Law 522-78, when each street and laneway was a hockey game waiting to happen.



FIGURE 4.10 “Melville Street should be called Meow-ville Street instead”

04.23.2014

My understanding of the neighbourhood I reside in is based on a few key routes. I can find my way to my usual destinations with ease, two grocery stores (depending on the type of food I need to buy), a corner convenience store (a few metres closer to home than another slightly further up the street), two cafes (though I prefer the farther one for its coffee), two laundromats (one I've never visited), and one community garden plot, all within 500 metres radius of where I live — five minutes by foot, two minutes by bike. I am familiar with where I could buy food, post mail, duplicate keys, and the best shortcuts, however, I would be at a loss to suggest where someone might pause to linger.

Little Miss Laure visited me one day in spring—we had the idea of wandering the neighbourhood together. Though I must admit, I was wary at first that she would lose interest quickly as we had no destination planned we set out on our adventure like amateur flâneurs. The only stipulation was that she lead the way. As soon as we established the rule of the game—or lack of—she was ecstatic. She hopped over fences, stepped onto the stones bordering my neighbour's front yard, climbed partway up a tall tree, rummaged through bushes, squeezed herself through the tight space between a hedge and the wall of a house, picked wildflowers and chased after cats. We conversed with five neighbours and discovered nine feline friends. We spent three hours within a 250 metre radius of my house, a distance I would usually cover in less than two minutes—I learned more about my neighbourhood from an afternoon with a nine-year-old than from all the years I have lived here.



FIGURE 4.11 A toddler jumping in the puddle

12.17.2014

The street was void of any activity, typical of a rainy day in the city. As I relished the sound of the raindrops pattering against the window, the silhouette of a pair lingering on the sidewalk drew my attention away from my computer monitor. I wondered why one tiny toddler and his lanky guardian were stalling in one spot — unusual even on a sunny day. Out of curiosity, I surveyed the surroundings, wondering what had captured their attention. The little boy stood on the edge of the curb, holding the man's hand and shaking with anticipation as he eyed the puddle a few inches below. Still too young and too small to fully coordinate his movements, the boy slowly stepped down off the curb, extending one leg at a time. Immediately as both his feet touched the water, he began jumping, splattering the water in all directions with joy. Each splash encouraged more splashes. Despite the man urging the boy to proceed with their journey, the toddler continued with his game, enrapt in the simple, capricious pleasure of disturbing the water and watching its movement.



FIGURE 4.12 Journey to the playground

07.23.2014

Before the mother left the house in the morning, she had suggested two places for an afternoon stroll with the kids. The schoolyard located across the street from the house, a minute or two away by foot, or the alternative option of a park adjoining the community centre with an ice rink, seven minutes away. “We always go there, I don’t want to. I don’t like that one!” The boy blurted out, voicing his reluctance when his older sister had suggested the closer option. He grabbed his red Spiderman cap from the bench by the door as he rushed out of the house and led the way to ‘his’ park instead.

My confusion over his affinity for the park as opposed to the playground faded as I watched him meander along the route, balancing on curbs, inspecting shrubs, and swinging in circles around posts. He made as much of a game out of the journey to the park as on any of the play equipment when he finally reached the destination. Each turn in the route opened on to a new field of play.

RECLAIMING THE CITY

(PLAY WITH AND WITHOUT GROUNDS)

What draws a child to a particular place? What are the essential elements that can capture and sustain his or her attention on multiple occasions? The following observations examine seemingly incongruous spaces and events, searching, sometimes without resolution, for the key elements that create engagement and allow children the possibility of discovery and joy.



FIGURE 4.13 Bubble man in Piazza Santa Maria di Trastevere, Rome

04.22.2012

What is it about bubbles that appeals to people from all walks and all stages of life? Perhaps it is the precise spherical shape, or the incredibly fragile nature of the microscopically thin film of soap, or the beautiful colours that swirl and shimmer, or most likely, a combination of all these phenomena. The urge to catch a bubble and to let it rest on your palm before it pops and disappears seems to be the aim of the game, trying to catch it before the wind whisks it out of your reach. Tracing the bubble's trajectory toward the sky as it escapes from gravity, one is confronted by the glistening, iridescent colours shimmering in the light.

The bubble man at Piazza Santa Maria di Trastevere in Rome appears every Sunday when the sun is out. He often sets up his stand in the same place, attracting a crowd of joyous children. The barren piazza is immediately transformed by the capricious movements of the bubbles. Bubbles, ephemeral and as weightless as air, caused screams of joy in the middle of the afternoon. Some kids chase after the bubbles, hoping to preserve the delicate forms in their hands for a brief second. Others take delight in popping the bubbles, watching the forms splatter in mid air once in contact with a finger or a slap. Despite leaving no trace, the brief, shimmering lives of the bubbles before being popped was enough to capture the children's excitement. The exuberant expressions on the children's faces are contagious. Even the adults who were once in a hurry to escape from the tourist zone stop and marvel at this cheerful scene.



FIGURE 4.14 Confetti in Piazza San Cosimato, Rome

03.07.2012

A simple game of confetti enlivened a dreary plaza — from clumped fistfuls, confetti dispersed into clouds of shivering colour. The ability of something to change from a single mass into thousands of floating pieces seems to fascinate children whether it's a pile of leaves or a clump of fresh snow or lit sparklers or a fire cracker or dandelion seeds — the frenetic scattering capturing their easily distracted attention. The inherent property of these objects are completely malleable based upon the condition they are in; the lightness of each singular object makes it easy to be picked up and swept away with wind or the toss of a hand. These objects become transient, and asserting and inserting joyous memories which can be easily reflected upon, activating a space instantly where spectators become as involved as the participants.

Unlike the bubbles, after the game was done, the remnants of the confetti remained, stuck between cracks, scattered on top of objects, or buried with time. Through the afternoon and night, and into the next day as the confetti sunk deeper into the cracks of the city, each passerby was reminded of the spontaneous play that had previously erupted.



FIGURE 4.15 Boys on a fountain in Venice

10.31.2010

Children have an uncanny ability to appropriate any objects in their environments that capture their fascination. A bench transforms into a fortress, a curb becomes a tightrope, patterned paving becomes rocks scattered in lava, water running in a gutter becomes a river full of gushing rapids.

The aberrant fixtures of a city act as props in the games of their imagination. Sometimes, the more ordinary an object appears to an adult, the more fascinating it is for a child. Were these two boys castaways on a raft? Were they defending a castle from a siege? Did they peer over the edge of the well cap as though looking over a mountainous precipice into an abyss?



FIGURE 4.16 Water bubble next to a schoolyard

07.20.2014

Bloor Street, is a major thoroughfare in Toronto. The diverse ethnic communities of the city are spread and intermixed along stretches of the road. Occasionally, sections of Bloor Street are blocked off for festivals allowing only pedestrian access. Walking on a car-less road is a liberty I find refreshing every time — a chance to wander aimlessly without the worry of watching for speeding cars.

During one such festival, my curious meander brought me to the asphalt field next to a school. The sight of kids rolling across a pool of water in inflated plastic spheres took me by surprise. I found it hard to understand why anyone, or any child, would want to be confined to the ball. Each child who entered a sphere seemed to fumble, unable to maintain their balance while floating on the pool of water. The result was a sort of senseless discombobulation sending the participant back to a time before they could walk. Movement devolved to crawling. Yet there was a steady line-up of eager children waiting for their turn to experience the disconnection from solid ground.



FIGURE 4.17 Rainbow trout fishing pool

06.19.2014

For more than thirteen years, the Scadding Court Swimming Pool is turned into a trout pond for one week each summer during the maintenance period. The pool is drained and dechlorinated before being refilled with fresh water and stocked with 2,000 rainbow trout. The unexpected transformation of the pool enables residents of the surrounding area to experience what is typically an outdoor pastime in an urban setting. The temporary occasion brought nature to the city as an adaptive and imaginative use of space, similar to how a child re-distributes and re-thinks the components of a city. The activity inverts the role of the users in the swimming facility—people line the waters' edge to cast their fishing rods and watch the movements of the fish through the clear water.

The excitement of the otherworldly indoor experience contrasts with the usual calmness associated with fishing in nature. The close proximity of the anglers and the clarity of the water intensifies the excitement as fishing enthusiasts have the chance to watch firsthand the tense competition between hunter and prey.



FIGURE 4.18 Two girls climbing in a rope structure at the Corktown Common

05.04.2014

Corktown Common is an 18 acre park built on remediated industrial lands and acts as a major flood protection landform as well as offering recreation and enjoyment for the residents of the area. The park has more than 700 trees, along with thousands of shrubs and aquatic plants, creating a diverse habitat for wildlife. A large marsh in the middle of the park functions as a stormwater management system and is home to birds, frogs, ducks and other animals.

A play space is incorporated into the peak of the landform, inviting children and their parents deep into the park, helping to activate an area once considered derelict and even dangerous in its contamination. From the hilltop, children and the adults who accompany them gain a new perspective on the city, overlooking the train tracks, highway, river and lake to the east and south and, from the same spot, the ponds, marsh, and vegetation foregrounding new developments to the north and the downtown to the west. The eclectic urban mix combined in the view from one point provides a unique experience in the city.



FIGURE 4.19 Underpass Park located beneath the overpasses of Adelaide Street, Eastern Avenue, and Richmond Street

05.04.2014

The imposing concrete overpass structures of Adelaide Street East and Eastern Avenue (the extension of Richmond Street East) have long been purported to pose a barrier between downtown Toronto from Lake Ontario, preventing the city from connecting with its shoreline. As development in the area increased, the city saw a need to re-purpose the derelict, uninviting, and under-used space under the overpasses to create a welcoming amenity for the community. The resulting Underpass Park is a 2.5 acre space activated through a skateboard park, basketball courts, art installations and children's play structures with an emphasis on pedestrian connection and passageway. The overpass shelters users from the rain and snow, creating ideal conditions for people in the neighbourhood to congregate throughout the year.

The serenity of the park is intensified and juxtaposed with the bustling traffic overhead. As I strolled beneath Adelaide and Eastern Ave, listening to the whizzing cars above, I felt an indescribable sense of ease. I became aware of the rare occasion where motor vehicles seemingly co-inhabit the same space as people. The laughter of kids running around the play structures and adolescents testing their skateboard limits are indications that fringe space offers an alternative refuge in an urbanized area.



FIGURE 4.20 Two boys constructing with wood planks

06.26.2013

A young girl in her pink leotard swimsuit handled a shovel twice her size while a boy in a blue baseball cap directed his playmate in assembling pieces of scrap wood boards. Near the perimeter, a toddler in diapers was overjoyed by the fresh water gushing out of the freestanding faucet spilling onto his forehead and dripping down his body on this sweltering day.

The composition of young children, covered from head to toe in dirt, roaming free without guardians towering over them was a refreshing sight. I hopped over multiple barren troughs and channels and discovered a few streaming with water. As I marveled at the generous size of the play area, the young girl in pink leotard swimsuit noticed my curiosity and began to update me on the itinerary of their task at hand. “We are building a bridge!” She exclaimed with a smile beaming across her face. One hand held the metal shovel, the other pointed to the small stream of water running down the newly dug channel. Her excitement was infectious, I rolled up my jeans and started digging.

My memory of the sandpit at Dufferin Grove Park remains vivid though I have only been there once. The girl in the leotard swimsuit, the toddler in his diaper, and the boys in striped shirts are ingrained in my mind. Prior to my visit, I had never seen children with so much pride at a playground — each child filled with a sense of ownership of the environment, claiming space for urban play. The roles of adult and child magically reverse at the park— the child takes command while the parent, who has long forgotten what being a child is like, waits on the sidelines watching as the landscape of the park is made, destroyed, and remade again.



FIGURE 4.21 Three girls on snow mounds

03.01.2015

Snow turns entire fields into sandboxes. After a snowfall, when the weather has warmed just enough, snow forts, snowball fights, and snowmen seem to spontaneously appear, completely reorganizing the formerly familiar landscape.

Even mounds of snow left by plows or half-melted constructions spark curiosity, offering new terrains to explore and claim. After school, the kids ran up and down their small snow piles, each trying to claim one for themselves, jostling to be king of the hill. As parents collected their children, the few who remained made games in their own minds, climbing and descending, digging and lounging without any specific aim.

In the spring, as the snow begins to melt, puddles encrusted with thin sheets of ice and water winding through channels in the snow show the traces of a winter's worth of play. As the sun beats down on the playground, the last remnants of compacted snow and ice mark the spaces where an untold number of games took place.



FIGURE 4.22 Purpose of the railing

01.30.2015

“What is it?” The four-year-old asked as she halted midway on the stairs, one foot already on the next step. All I saw was the dusted snow on the concrete. My primary concern had been the uneven base step which she had hardly noticed. “What’s this? Why is it here?” Perplexed, she posed the question aloud again, this time with assertion. My reflex to fumble in my pocket for the door key was diverted by her question. I scanned around hurriedly and realized she was referring to the wrought iron railing that her tiny palm was gripping, her query directed at the decorative section of the ironwork. The curved and ornate railing disrupted the rhythm of closely spaced vertical bars, making it difficult for her to grab and use as a support to haul herself up the steps, nearly as tall as her legs. “Why is it here? I can’t hold on to it.” In response to the inconvenience spurred by the banisters and ornaments of the railing, she crawled up the remaining stairs on all fours.

As I set out to observe the everyday interactions of children within the city itself, I discovered how the basic elements of a city are dissected, re-imagined and re-configured by children. Children slow down to notice the change of seasons, the trickle of water through the gutters, or the coloured splatter of mulberries on the ground.

Adults, on the other hand, are preoccupied with safety, danger and the notion of complying to building codes or rules and often dismiss children's needs in exchange for their own peace of mind. Prescriptive design for the purpose of adherence to codes have become the norm— and their rigid implementation can give a false sense of security while at the same time failing to address the user's needs. In the example of the railing, the importance for a child of the space below the required railing height was overlooked. The banisters, meant to prevent falls over the sides of the stairs, got in the way of the use of the stair itself. To a child who isn't big enough to negotiate the steps of the stair, the railing itself was a hindrance.

Before we design and construct, we ought to consider play's impact on the city, from the scale of the puddle to the scale of a designed element such as a railing, or that of an urban area that could otherwise be bleak—an area under an underpass, or an area prone to flooding. If you allow the childlike sense of wonder and inquisitiveness to guide you, another city is revealed.

This thesis is a proclamation and an urge not only to recognize the necessity to learn by challenging, but also by thinking beyond and before the restrictions set forth by the city or the abstract concerns in our own minds. Children shadowed by their parents lose the ability to assess situations on their own,

detaching them from relationships with their neighbours, their neighbourhood, and the city as a whole. Likewise, if we engage with the city only in the shadow of regulations, building codes, and prescribed space, we will miss out on much of what the city can offer us and our children. Through interacting with children and re-examining the world through their eyes, I found beautiful parts of the neighbourhood and the city that I once thought was nothing more than a place to sleep and eat. By stripping children's independence, we fail to appreciate their ability to engage with space — but if we listen carefully and walk slowly, we can hear their own criticisms along with their love declaration to the city.

epilogue

A few months ago, I attended an event hosted by Creative Mornings Toronto featuring guest speaker, Kiron Mukherjee. The room of drowsy early-risers was quickly enlivened by his compelling enthusiasm. The room awakened by a small and unusual fossil that accompanied Kiron's talk — a solid brown object with round fractal shape similar to a piece of cauliflower, the surface darkened with the sheen of human touch. Kiron eagerly educated the attendees on the petrified remain, a remnant of dinosaur faeces. He recounted the incredulous feeling he had when he first learned about that fossil as a child attending summer camp at the Royal Ontario Museum (ROM). And he had been involved with the museum ever since. First as a member when he was 8 then as volunteer at age 14 and took on his first job at the institution a year later, eventually making his way to his current role as Assistant Coordinator of ROMkids (the museum's family and children initiative).

The presentation drew to an end with a question period. One woman asked Kiron what he had noticed in changes to the children's program since he became involved with the museum. Kiron paused to think, the gleam of his eye faded and his keen demeanour earlier was replaced with a discernible frown, he answered, "Administrative issues. The amount of time and effort spent on ensuring the safety of the child. To make sure the child is being taken care of by the specified person." Kiron elaborated on the implementation of sign-in and sign-out sheets, the crucial procedure in verifying identifications of the people picking up or dropping off the child to the museum. This precaution is not limited to preventing strangers from being in contact with the child, but mandated even for people who are in close relation to the child. Though the camp leaders might recognize the guardian of the child, due to legality from divorce or separation, the guardian might not have the right to be in contact with the child on certain days or at all. Safety of

the child, in the modern sense, is no longer limited to unpredictability of the strangers, streets and the environment but an inherent unsettling feeling of fear. The scrutinizing policy ensures a level of comfort for the parent, but to me, the routine is reminiscent of a parcel delivery. “Please sign here. Thank you.” Better safe than sorry, the motto of the present day parents — a phrase and mentality, I am fearful of.

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