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Playscape: designing for children in Berea and Hillbrow

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playscape

DESIGNING FOR CHILDREN IN BEREA AND HILLBROW

by Philippa van Ryneveld (303712)



Playscape;
('plā, skāp)

Noun: **A playful landscape characterised by the occurrence of enjoyment by the public & all those that interact with it.**

ABSTRACT

A child's world is one of imagination; of toys, play and stories. A child's world is a world of its own with specific needs, which, if not met, will have long-lasting consequences into adult life. This is the unfortunate reality of children growing up in Hillbrow and Berea without opportunities for proper development and learning.

It is through play that a child develops and learns to cope with his environment. This project therefore takes as its subject matter the place of play for city children. It constructs an argument for the 'playscape' which encompasses both, the spaces in which children (and adults) are invited to play as well as the idea of landscape which, from the start has been central to child design. This thesis proposes a 'toy library' within a larger park of play. It is a design of a child's world and a world of play, characterised architecturally by playfulness and functionally serving the children, teachers and parents of Berea and Hillbrow.



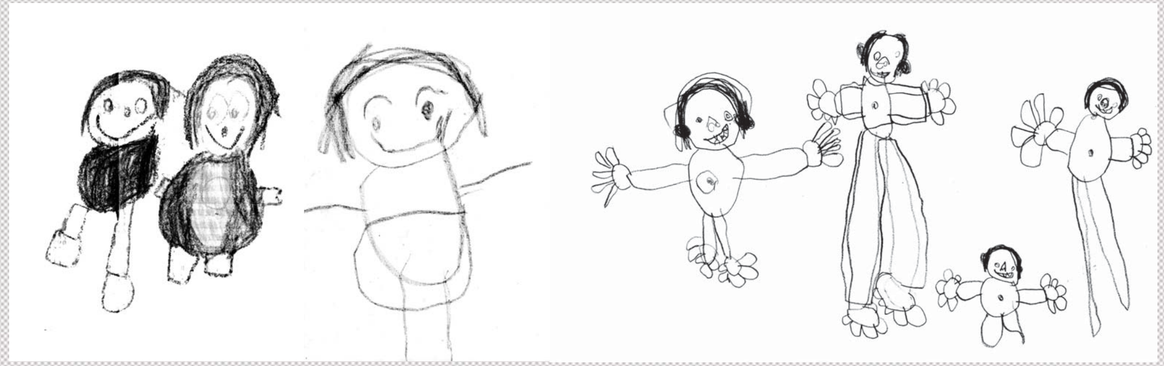
I.
DECLARATION

This document is submitted in partial fulfilment for the degree:
Master of Architecture [Professional] at the University of the Witwatersrand, Johannesburg, South Africa, in the year 2013.

I, Philippa Susan van Ryneveld (303712), am a student registered for the course Master of Architecture [Professional] in the year 2013. I hereby declare the following:

I am aware that plagiarism (the use of someone else's work without permission and/or without acknowledging the original sources] is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas, and visual materials of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my in my own work.

Philippa Susan van Ryneveld
25 October 2013



II.
ACKNOWLEDGEMENTS

This thesis is dedicated to my family. To my loving parents, Mark and Sue, thank you for your constant support and guidance throughout my degree. Thank you to my mum from whom this thesis was born. To Lisa, my sister and play-mate, I will forever cherish our long imaginative games and endless creative holidays. And To Jaron, for helping me climb my mountains and for being there through every high and low.

To God, my rock, because only You truly know both the excruciating pain and the uncontainable joy that this degree has thrown at me. Your joy is my strength.

To Beks, my 'other sister', for the meals and long chats and for sticking with me for the best part of 24 years. And to both my sister-housemates, for the dinner and baking but most of all for the laughs.

To the masters class of 2013, it was a pleasure. Particular thanks to Kier, for the laughs, the Lumineers and the lifts and Gaby for infusing colour into our everyday lives. As well as to Jax, Ady and Steph, my undergrad awesome foursome. Thank you Jon Noble for your thoughts and endless philosophical discussions and Lana, Adam and Mush, for the tea, croissants and kitchen chatter.

Catherine Moultry, thank you for the toys and crits and overall support. Paul Kotze, Hilton Judin, Diaan van der Westhuizen, and Hannah le Roux, thank you for your input.

To everyone else who made the time to meet with me you will see evidence of your input somewhere in this document. Thank you!



DOCUMENT STRUCTURE

01. THEORETICAL UNDERPINNINGS..... p.07

The life of a child is constituted to a large degree by the world of toys, play and literature. A child's world is one of imagination and is often a world apart from that of reality. In a similar way, architecture creates a world of its own and thus imagines through its built form.

02. THE CONTEXT OF PLAY..... p.30

Within the child's world is the very evident element of play and 'playfulness' . But what is the place of play (both socially and physically) in our world today? And how has it been used as a tool in the arts or as a driver for creating children's spaces?

03. A PARK IN BEREA..... p.48

One such 'space of play' is that of the playground and thus also, the park. In Hillbrow and Berea (where my site is located) concrete and grime define the physical environment and so it raises very specific issues for children. What is it that a child needs within this environment and what makes a park a suitable location for a children's facility?

04. DESIGN..... p.74

In response to the inspiring world of the child as well as the issues he faces in Berea and Hillbrow, this project proposes a Toy Library located within, and integrated with, a neighbourhood park. It proposes a building that is a playscape and a toy and that engages children in play.

05. BIBLIOGRAPHY.....**p.160**

INTRODUCTION

“Man only plays when he is human in the full sense of the word and he is only completely human when he is playing.”

Friedrich Schiller

The term ‘playscapes’ is one coined by architect Aldo van Eyck in order to relate the action of play not only to a playGROUND or a kindergarten (for example) but rather to all those spaces in which children (and adults) are invited to play. It alludes, too, to the idea of landscape and nature which from the start, has been central to childhood design and curriculum.

Architecture as both an art and a creation has always been influenced by and made an impact on ‘play’. The two are intimately related. Play characterizes the way an architect creates. It is through sketching and playing with models (the toys of building) that an architect may imagine and ‘play make-believe’ in advance of realizing the project. Architecture also has the capacity to enable play and to inspire playfulness in its users. It has the power to either encourage or crush play.

The space of play has traditionally been ‘the park’ which began as a place apart from work and the difficulties of everyday life: a place to which one could escape - an ‘other place’ to rejuvenate and ‘recreate’ oneself. The ‘shelter’ of playfulness has been the folly: a space that allows for behaviour that is discouraged in general society: a place of fantasy and a place where play, rather than function, is its core nature.

The reality of modern cities (including Johannesburg) is such that the environments crush play and socially, play is not encouraged or given enough emphasis in crèches and schools. Functionally, it is the Toy Library that offers a place of play for today’s children. Because it is independent of schools and supplementary to the home, it has the capacity to reach a broader range of children, teachers and parents and as a place apart from the home and the school, perhaps this is the ‘folly’ of social institutions.

This, however, is not to discredit the importance of play. It is generally accepted in education that play is the foundation of a child’s learning experience. Even Albert Eintein said: “Play is the highest form of research.” (www.goodreads.com) Yet 68% of South Africa’s children are not receiving any early childhood development (ECD) services. This leaves a large gap in children’s developmental process.

Can architecture allow and encourage man to play and thus also assist in children’s development?

The first chapter of this thesis discusses the theoretical underpinnings of this project and introduces children as seen through a lense of play. It explores the ‘other world’ of childhood which includes the worlds of play, toys and literature. Through a child’s imagination, these merge into one fantasy world.

The second chapter, *The Context of Play,* extends the concept of play and playfulness into the arts and architecture. It discusses playfulness as an aesthetic and as a functional driver for design. It asks the question: what is the place of play in our world today? It thus introduces the spaces of play and childhood with an emphasis on the artist and architect as ‘a practitioner of playfulness’.

The third chapter, *A Park in Berea,* introduces the broader site of this project and context in which Hillbrow and Berea’s children find themselves. It raises the issues that city children have to deal with and thus also, the issues that a children’s facility must respond to.

The fourth chapter, *Design,* concludes this thesis with the design of a ‘toy library’ within a larger park of play. It is a design of a child’s world and a world of play, characterised architecturally by playfulness and functionally serving the children, teachers and parents of Berea and Hillbrow.



01.

THEORETICAL UNDERPINNINGS

"Play is not bound by reality - it leaves the everyday world far behind."
- Richard Dattner

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AIM:
To understand the world of children which is play and how this relates to architecture.



ENTER THE WORLD OF PLAY, TOYS AND LITERATURE

Storytelling is a certain representation of the world or of other worlds. It is a description of reality or fantasy and in this regard creates a new world, an imagined world that can only live/exist in the mind of the 'imaginer'. Literature creates that world through its stories, so too does play when imagination is acted out by children. In a sense then children are transported to that imaginary world and their play happens there. The interactions of play, though seen to exist in the 'real world' by outsiders, are in fact being acted out in another world altogether. In that world, a child's imaginings become his/ her reality; a reality which is more colourful, more adventurous and more exciting. So too, are toys made a part of that other world through children's imaginings: a plastic doll may become a superhero with special powers and super-human qualities. In that world, at that moment, toys may be just as real to a child as his human friends.

"In a feat that has been accomplished by few authors of children's books, J.M. Barrie entered into the imaginative world of play *with* children to discover what was on their minds before he set out to write a book for them." (p178 Tatar, 2009) Charles Dodgson (or Lewis Carroll as he called himself) did the same. Barrie's play, *Peter Pan* and Dodgson's *Alice's Adventures in Wonderland* appeared around the same time and were both revolutionary revolts against the adult conservatism of the time. "Carroll spent 'golden' afternoons with Alice Liddell and her sisters; J.M. Barrie was to adopt the five Llewelyn Davies boys later in his life. And both notoriously courted children, for, unlike parents, they had to devise strategies for capturing the attention of girls (in the case of Carroll) and boys (in the case of Barrie). What better lure than the promise of a story or of a play? Telling tales and staging adventures enabled both Carroll and Barrie to discover what was on the minds of children they adored to create the first books with a deep understanding of what appealed to the child rather than what mattered to the adult." (p173 Tatar, 2009)

In this chapter I will use *Alice's Adventures in Wonderland* to discuss the worlds of play, toys and literature that constitute the 'other world' of childhood. What is their value in a child's life? What is this 'other world' that one experiences? I will also touch on the world of architecture and the relationship between imagination and the built world. After all, what is 'reality'? Is it only that which we experience physically?







Vinny and the Black Cat (Bedtime Stories)
(media-cache-ec0.pinimg.com)

TV - Friend or Foe by Anel Annandale
(www.childpsych.co.za)

i. THE WORLD OF CHILDREN'S LITERATURE

At the time when Lewis Carroll wrote *Alice's Adventures in Wonderland,* children's literature focussed on good behaviour and morals and prior to that, conveyed mainly religious instruction. Even Alice was reading those books as Carroll illustrates in his first chapter soon after she falls down the Rabbit Hole:

> "...this time she found a little bottle on [the table] and round the neck of the bottle was a paper label, with the words *Drink me* beautifully printed on it in large letters. It was all very well to say 'Drink me', but the wise little Alice was not going to do *that* in a hurry. 'No, I'll look first,' she said, 'and see whether it's marked *poison* or not'; for she had read several nice little histories about other children who had got burnt, and eaten up by wild beasts and other unpleasant things, all because they would not remember the simple rules their friends had taught them: such as, that a red-hot poker will burn you if you hold it too long; and that if you cut your finger very deeply with a knife, it usually bleeds; and she had never forgotten that, if you drink much from a bottle marked 'poison', it is almost certain to disagree with you, sooner or later.
> However, this bottle was not marked 'poison', so Alice ventured to taste it, and finding it very nice ... she very soon finished it off." (p11-12 Carroll, 1990)

And so the fairy-tale was born: a story without hidden agendas for improving children but rather a nonsense story appealing to the childishness of children. As Maria Tatar, author of *Enchanted Hunters: The Power of Stories in Childhood,* writes:

> "Presented as a series of surreal adventures in which the notion of development and education are banished, *Alice's Adventures in Wonderland* revels in a world that not only contains wonders but also offers the promise of escape from the adult world of sense and meaning." (p193 Tatar, 2009)

Today, literature is threatened by the increasing onslaught of digital media: television, movies and video games. Many have argued that there is much more power in film as it has the advantage of visuals as well as sounds to arouse its viewers. In addition, McLuhan criticises books for encouraging introspection and isolation which is far from the animated story-telling circles around a fire where story-telling began. His argument is that reading "leaves little room for improvisation, social interaction, and creativity. Books activate only a small portion of the brain while deadening sensory and motor cortices." (p71 Tatar, 2009)

The counter-argument to 'stories are just words' lies in the 'magic' created through the process of reading. The pure phenomenon of reading: of one person turning "bare lines into living reality" (p72 Tatar, 2009) empowers the reader far more than passively watching a film. A child learning to read, finds himself acquiring "a completely new sense that engages all the others in something that his whole body can 'decipher, translate, give voice to, read.' The concentrated energy of letters is even more potent than real sights and sounds." (p72 ibid)

In Tatar's book, a recurring theme is the absorption of children into their books. This is not to say that the book itself draws them in, but rather that the authors draw their readers into the fictional world they create. It is the job of a fictional book to 'create' a world complete with characters, geographical characteristics and even histories. Sometimes it can take only a single word to evoke a world. (p15 Tatar, 2009) Walter Benjamin, a philosopher and famous collector of children's books says that "children cross over into story worlds, breathing the same air as the characters and mingling with them in their world in ways that adults cannot. (p5 ibid)

> "It is not uncommon for children to be completely absorbed in a fictional world – to the point where the story world and its characters seem, in Proustian fashion, to be more 'real' than the places they actually inhabit." (p20 ibid)

According to McHale, theorist and author of *Some Ontologies of Fiction*, a fictional world can never be fully determinate. There are always gaps in the description of a fictional world and so a book is like a game of 'connect the dots.' The connections lie in our imaginations where facts are absorbed translated and expanded on according to our own past experiences and knowledge. As a word is read, it enters one's brain and transforms into an image. This image then exists in the realm of the imagination which, in conjunction with other images, can very quickly form an entire world in our minds. The process of engaging our imaginations in filling the gaps left by authors is an intensely active one and very personal to the point that no one else will enter that fictional world that you have created even if they read the same book.

ii. THE REALITY BEHIND WONDERLAND

In order to understand the world of childhood, of the nature of play, narrative and toys, I feel it is important to understand something of the nature of children too. No child is the same and many external inputs will influence a child in various ways. I therefore feel it necessary to shed some light on two very important people behind *Alice's Adventures in Wonderland* as well as the context in which it was written. The first is the author, Lewis Carroll (whose real name was Charles Lutwidge Dodgson) and the second is Alice Liddell (and her siblings) on whom the character was supposedly based or nevertheless for whom the story was written.

At the age of 2, Alice moved with her family to Oxford where her father took up the post as Dean of Christ Church College. The children found, at the Deanery, a wonderful garden and play space of which they had been deprived at their previous home. Amor, author of *The Real Alice: Lewis Carroll's Dream Child,* writes: "One of



Alice Liddell, the 'real' Alice
(p212, Woolf, 2010)



The Deanery garden at Christ Church, Oxford
(p.38 Amor, 1981)



Alice discovers the door to *Wonderland*
(friendfortheride.files.wordpress.com)

the great delights of living in the Deanery was its garden, as Alice and her sisters quickly found. ... [N]ow they had direct and undisturbed access to a private garden of considerable beauty. It was large and sheltered, with a beautiful rectangular lawn just right for croquet, and surrounded by fine herbaceous borders ... Side by side with the formal area was a small glade which provided welcome shade from the heat on summer afternoons, and a leafy haunt for adventurous children. The most impressive tree in the garden was a magnificent and ancient chestnut which formed a major set-piece in the imaginative games which the children played." (p44-45 Amor, 1981) This sheds some light on the nature of their childhood, much of which (if not spent with their governess having lessons) was spent in the garden playing imaginative games or out on boating trips.

In the culture of Victorian England, curiosity in children was not promoted and was actively discouraged. It was seen to encourage 'wonder' which was looked down upon and so curiosity was 'bred' out of children. The playful Charles Dodgson, however, abhorred dull societal rules and was wonderfully curious himself. He sought children's company over that of adults' for this reason. It is not surprising then that it was he who sanctioned curiosity in mid-nineteenth century Victorian England and thus provided a turning point in children's literature.

Maria Tatar writes:

> "It was the genius of Lewis Carroll to create in Alice's Adventures in Wonderland a character so brimful of curiosity that she herself turns into a curiosity, a girl who arouses wonder in her wanderings through a world that promises unlimited imaginative stimulation by forever becoming, in what has now become a famous formulation, 'curiouser and curiouser.'" (p188 Tatar, 2009)

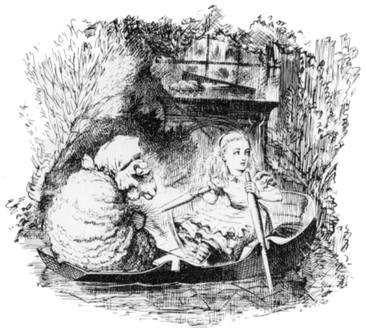
Charles Dodgson's childhood was one equally full of play and curiosity. He grew up in an extremely large family of 13 with 2 older sisters and 7 younger siblings. He was the eldest boy in the family and emerged as the family entertainer. As a child he was very clever and interested in mathematics. He did not, however, attend school until the age of 12 (education was not compulsory in those days) and so one can assume that he and his siblings had a lot of time to themselves. Jenny Woolf, author of *The Mystery of Lewis Carroll* (2010) gives us some insight into his childhood: "Carroll ... [involved] his brothers and sisters in vast imaginative games in their huge garden. Railways being the latest thing at the time, he made a train from a wheelbarrow, barrel and a truck. It would carry its young passengers from one 'station' in the rectory grounds to another, in accordance with a long and deliberately ridiculous list of railway regulations that he concocted for them. He learned sleight-of-hand and dressed up to amuse his siblings with magic shows. He helped make a toy theatre – he was good with his hands – and wrote puppet plays which he and the older ones performed." (p15) He loved the attention of his younger siblings which clearly persisted into his adult life. Biographies about him have said that had he not become a mathematics lecturer, performance would have suited him well (however the fact that theatre was a profession much frowned upon in those days, would have had an equal part in dissuading him from taking up the profession.)

After studying at Oxford, Dodgson became a junior Fellow there and mathematics lecturer. The nature of oxford at that time was such that few children were around because bachelorhood was a requirement of the professors. Having grown up in a large family with several younger siblings, Dodgson therefore missed the company of children. Although his position as a mathematics master at Oxford might have rendered him rather dull, he was still very creative and animated. He was passionately interested in photography and pursued it from the age of 24. He also still delighted in story-telling. He never took it up professionally, it was simply the best way he knew how to capture his child-friends. He told many a story that was not written down and one might say that he was more of an actor than a writer. Even *Alice's Adventures* is written in a story-telling manner, oftentimes addressing the reader directly as though they were his live audience.

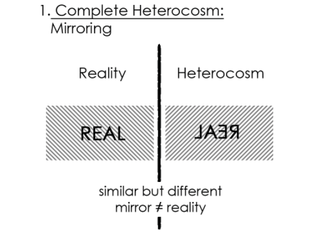
Dodgson built up a relationship with the Liddell family and a close friendship with the children. In the colder seasons, the children would visit him in the library where he would tell them stories. Alice wrote: "When we got there, we used to sit on the big sofa on each side of him while he told us stories, illustrating them by pen and ink drawings as he went along [until] we were thoroughly happy." (p.70 Amor, 1981)

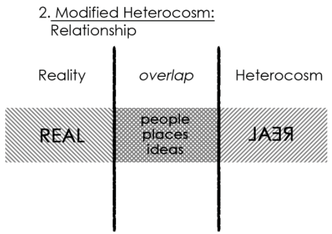
In the warmer months, Dodgson joined the Liddell family on many boating outings and sometimes even took the children out without their parents. Many stories were told and lost on those outings until one trip in particular marked the beginning of *Alice's Adventures in Wonderland*. The story would have been like any other he had told and included in it a character from his audience, Alice. Dodgson wrote: "Many a day we rowed together on that quiet stream – the three little maidens and I – and many a fairy tale had been extemporised for their benefit ... yet none of these many tales got written down: they lived and died, like summer midges, each in its own golden afternoon until there came a day when, as it chanced, one of my little listeners petitioned that the tale might be written out for her." (p73-74 Amor, 1981)

Was it Carroll's interactions with the imaginative Liddell children that inspired his stories? Having understood his own childhood, I am inclined to think that he already possessed an extremely imaginative mind and was a natural story-teller. The children he interacted with were clever and imaginative too and in their company he was able to explore his creative thoughts. While many authors have called Alice Liddell his "dream child", it would



An illustration of Alice rowing in
Alice through the Looking Glass
(p.68 Amor, 1981)





appear that he drew equally from his own experiences as a child as well as those interactions with the children of Oxford. It is my opinion that in fact Lewis Carroll was the dream child and learned more and more from other children until one day, Alice implored him to write out one of his wild stories.

iii. THE CONCEPT OF THE 'OTHER' WORLD

"The attack on Victorian stuffiness, humbug, self-importance, moral earnestness, utilitarianism and middle-class complacency was nurtured in a generation of children who needed the alternative world of *Alice in Wonderland* and *Through the Looking-Glass*." (p74 Dusinberre, 1987) In Lewis Carroll's own escape from that 'stuffy' society, he created 'other' worlds through his storytelling one of which has become world famous: *Wonderland*.

In his chapter, *Some Ontologies of Fiction*, McHale goes into some depth about the theories of these fictional 'other worlds'. He writes this from an ontological perspective which Thomas Pavel defines as "a theoretical description of a universe." (p27 McHale, 1987) One of "the oldest of the classical ontological themes in poetics," McHale writes, "is that of the *otherness* of the fictional world, its separation from the real world of experience." (p27 ibid) This 'other world' is enclosed and defined by the limits set by the author." (p28 ibid) The idea of the 'other world' was first introduced by the poet, Sidney in 1595 who called it a 'heterocosm', a universe separate or apart.

This definition of the fictional world as a heterocosm depends on an ontological difference between the fictional and the real. At the same time the two will inevitably overlap for a fiction is never pure fiction without some reference to the real. The first theory of relationship is that of imitation or mirroring, where the fictional world mirrors aspects of the real world while never actually becoming the real world and remaining distinctly different. McHale writes the following about Sidney's mimetic theory of poetry: "For the real world to be reflected in the mirror of literary mimesis, the imitation must be distinguishable from the imitated: the mirror of art must stand apart from and opposite to the nature to be mirrored." (p.28 ibid)

This theory, however, is inadequate as no fictional world can be completely distinct from reality. For this reason a modified heterocosm theory admits an overlap between the heterocosm and the real where 'real' elements (such as people, places or ideas that have existed in the real world) are incorporated rather than simply reflected in the heterocosm.

This complexity is certainly true for Carroll's *Alice's Adventures in Wonderland*. While much of the story is fantastic and reflects perhaps a distortion of reality, many real elements are included too. Some of these elements make reference to personal interactions between Carroll and the Liddell children such as croquet games, chapter references to Alice's French textbook and people they encountered together (such as Dodgson, Lorina, Edith and Robinson Duckworth, cleverly renamed as the Dodo, Lory, Eaglet and Duck in the second chapter of Alice's Adventures) (p.158 Woolf, 2010) Other real elements that were incorporated are more direct such as Alice wondering if her cat Dinah would miss her very much. (p.9, Carroll, 1990) This is a reference to Alice Liddell's older sister's cat named Dinah, which she loved and adopted as her own. Anne Clark writes: "These were ideally happy days for the three little girls. The ordeal of learning French and Latin was counteracted by the pleasure of their favourite games: Pope John, Beggar my Neighbour and even whist. Croquet had also come to the Deanery lawn. As the children tried their luck with the croquet mallets, Dinah the cat often looked on ... Though Dinah had been given to Lorina, Alice adored her, and the little cat had become her special pet. So eventually she found the road to fame through *Alice's Adventures*." (p68 Amor, 1981)

In *Alice's Adventures in Wonderland*, therefore, Carroll incorporates the real world into *Wonderland* so that his audience may go there too with reference points to guide them. This, in fact, reflects his style of oral storytelling that was always intended specifically to entertain his immediate audience. He would personalise his stories to include that audience (individuals from the real world) and the story would often morph and change through the interjections and imaginings of his young listeners. "His stock of stories was seemingly endless. Sometimes they were new stories, other times they were adaptations of old tales. But the interjections of the three little girls led to expansion and adaptation, until the original had been altered beyond all recognition." (p.70 Amor, 1981) In this way, we can see that his *Wonderland*, was not an entirely alien world but one interwoven with special aspects from daily life, from the real world. Wonderland is essentially a modified heterocosm.

On the other hand, I must emphasise the fact that *Wonderland*, though bristling with real-life elements, clearly is a fictional world apart from that of our real world. Carroll makes a clear distinction between Wonderland and the real world by not only separating it through fiction, but further, through the character's (Alice's) imagination. We enter Alice's real world at the start of the book as she sits with her sister and wonders if she should make a daisy chain. (p.7 Carroll, 1990) Having removed us from our world into Alice's, Carroll takes it a step further by taking us into Alice's imagined world, Wonderland. According to McHale, "Characters inside fictional worlds are also capable of sustaining propositional attitudes and projecting possible worlds. Eco calls these possible-worlds-within-worlds, subworlds." (p.34 McHale, 1987)

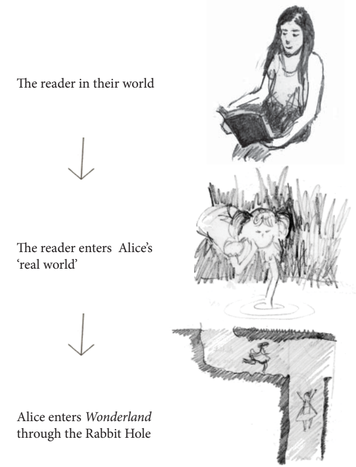
McHale theorizes Thomas Pavel's notion of 'possible worlds'; he writes: "Possible worlds depend on somebody's propositional attitude: that is, in order for them to *be* possible, they must be believed in, imagined, wished for etc, by some human agent." (p.34 McHale, 1987) Alice's imagination, it would seem, was so vast





Alice with the Dodo, Lory, Eaglet & Duck
(p21, Carroll, 1990)

Alice and the 'kitty' that makes its way into Wonderland through Alice's imagination
(p11, Carroll, 1989)



that Wonderland was believable and did seem possible to her. Wonderland is rich with oddities and impossibilities and even through Alice's questioning of the possibility of her world (and perhaps *because* of it) we are drawn into this strange other world. Despite its wild oddities, we imagine that it is possible.

> "...holding her hand on the top of her head to feel which way it was growing, and she was quite surprised to find that she remained the same size: to be sure, this generally happens when one eats cake, but Alice had got so much into the way of expecting nothing but out-of-the-way things to happen that it seemed quite dull and stupid for life to go on in the common way." (p.13, Carroll, 1990)

> "So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her. There was nothing so very remarkable in that; nor did Alice think it so very much out of the way to hear the Rabbit say to itself "Oh dear! Oh dear! I shall be too late!" (When she thought it over afterwards, it occurred to her that she should have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually *took a watch out of his waistcoat-pocket*, and looked at it, then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it..." (p.8 Carroll, 1990)

Later in the book, after eating the cake that makes Alice grow, she exclaims to herself: "Curiouser and curiouser!" In most fictional books we read, we are transported into the other world and that world is created for us, the readers. *Alice's Adventures* is unique in that Alice is constantly aware of the strangeness of this 'other world' she has entered and so too, then, is the reader made aware.

The possible worlds of fairy-tales, when read with a rational consciousness would seem absurd and would not draw us in because of it. However, "Thomas Pavel has argued that readers do not evaluate the logical possibility of the propositions they find in literary texts in the light of the actual world – as logicians would require them to do – but rather abandon the actual world and adopt (temporarily) the *ontological perspective* of the literary work." (p.33 McHale, 1987) McHale adds: "Propositions about the real world fall under the modality of necessity. Propositions in fiction, by contrast, are governed by the modality of possibility; they require, in short, 'suspension of belief as well as of disbelief'." (p.33 ibid) This, then, explains how we are able to accept the irrationality of fictional worlds, even perhaps enjoy the absurdness of their 'otherness'. "It would never happen here, but it is possible that it could happen there" one might think. Perhaps in *Alice in Wonderland* we think Wonderland to be a 'possible-world' because as it is a sub-world, it remains in the domain of Alice's imagination. If, then, our own imaginations are incapable of creating such an absurd world, we are drawn in by the possibility that Alice's imagination, in fact is.

iv. THE BUILT WORLD: IMAGINING ARCHITECTURE

This idea of 'other' worlds implies a significant separation between reality and fantasy. However, reality itself is difficult to define and so, too, the 'realness' of experiences. Bachélard and Chateau, great students of imaginal processes and play, have argued that one's inner experiences (i.e. those of the imagination) form a critical part of one's reality. For young children in particular, the distinction between reality and fantasy is even less clear. At the age of 2, I had an imaginary friend named "Tend Becky". She was an imaginary version of my best friend, and would appear when the 'real' Becky was no longer around to play with. "Tend Becky" was so real to me that once when my mum was driving out of the garage, I screamed from my car seat for her to stop because we had left my imaginary friend behind. Naturally, we had to stop and let her into the car. "Tend Becky" was just as real to me as any real friend. She was my constant companion until the day my sister was born and replaced my imaginary friend with a human one to play with. It is within the realm of play that reality meets the 'other' world in a very 'real' way, so to speak.

But what is the real world? The built, material world can perhaps be called 'real' and yet even that is open to our wild imaginations. As Juhani Pallasmaa, architectural theorist and author of *The Thinking Hand* writes: "The characteristically human mode of existence takes place in the worlds of possibilities, moulded by our capacities of fantasy and imagination. We live in worlds of the mind, in which the material and the mental, as well as the experienced, remembered and imagined, completely fuse into each other. As a consequence, the lived reality does not follow the rules of place and time as defined by the science of physics. In fact we can say that the lived world is fundamentally 'unscientific'." (p.127, Pallasmaa, 2009)

This blurring of reality and imaginings applies not only to a child's fantasy world, but also to the world of art and architecture. "Art creates images and emotions that are experientially as true as the actual encounters of life... These images possess all the experiential authenticity of those perceived by our own eyes. No doubt actual stimuli and imaginations in the other sensory realms are similarly close to each other, and thus, experientially, equally 'real'." (pp131-132, Pallasmaa, 2009) This reality of our imaginings is extremely personal and unique similar to our experiences of fiction. Only *we* may enter our world of imaginings. However I would argue the same for our external experiences: that experiencing art, architecture, music or nature touches us personally in different ways. I walk down the darkened aisle of a cathedral and the kaleidoscope of colours from the stained-glass windows touch my skin, the air chills my bones and the incense permeates my olfactory glands. Your experience will be different, even if remarkably similar. This is because not only do we bring our bodies to the work, but we carry with us our emotions, memories and associations. In this sense, one's experience of architecture is like a personal journey into the story-world of a book.

But what impact does the human have upon architecture? Can it change with the interactions of humans just as Dodgson's stories morphed through the interjections and imaginings of his young listeners? This I take as a challenge: for architecture to 'play back'; for architecture to allow its users into its 'other world'. For people to play with architecture through the playfulness of the architect.

v. THE WORLD OF PLAY

Educational theorists have emphasised time and again, the relevance of play in children's lives. Otto Weininger writes: "It is believed that the growth and development of infants are dependent upon play. Play is a learning process through which infants learn about themselves and what they can do ... For very young children, all activity is play, and from all play they learn. The desire to play, the absorption in play and the concentration in play activity are signs of a healthy child." (p.44 1948, Wilkinson)

Play has been theorized by the education theorist, Jean Piaget, as a way for the child to master his environment (both physical and social). On the other hand, Maria Montessori emphasised the impact the environment has on the child. In her book, *The Secret of Childhood*,



The Eames Toy:
a child-sized architecture that 'plays back'
(ohsolovelyvintage.blogspot.com.es/)

she writes: "The environment is fundamental; it must facilitate the expansion of the being in process of development by a reduction of obstacles to a minimum, and must allow free scope for a child's energies, by offering the necessary means for the activities to which they give rise." (p113 1971, Montessori) Is architecture, as a key component of one's environment, then not key to a child's development and learning?

Central to Montessori's philosophy is also the concept that the child must explore his own environment and learn through personal discoveries and activity. According to her method, the educator should essentially take a back role lest they should be an obstacle preventing the child from acting for himself. (Montessori, 1971) Piaget shares the view that movement and activity are key to a child's development. These educational theorists' belief is therefore that it is the *body* that learns. The child is the center of his learning and so then, is his body (for it is the body that experiences the world in all its varied aspects). Pallasmaa writes: "My body is truly the navel of my world, not in the sense of the viewing point of a central perspective, but as the sole locus of reference, memory, imagination and integration." (p.107, Pallasmaa, 2009)

The leading member of that body is the hand. An infant is born with a group of reflexes that are instinctual and his experience starts in his hands: sucking his fingers, closing his hand around an object, touching, learning, feeling. According to Pallasmaa, "Touch is the sensory mode that integrates our experiences of the world and of ourselves. Even visual perceptions are fused and integrated into the haptic continuum of the self, my body remembers who I am and how I am situated in the world." (p.101, ibid)

In addition, re-enactment of daily experiences is important for the child to explore and "relieve themselves of the painful things and find new ways of handling situations." (p.52, celebration) Play, therefore, also has a therapeutic role to help children cope with difficult life situations.

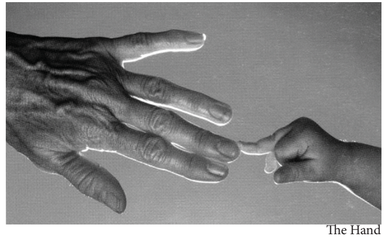
There are several different types of play and while theorists have categorised play in a variety of different ways, I will use the following categorisation by Dorothy Needles which distinguishes 4 types of play: sensory-type play, gross-motor skill type of play, cognitive skill type of play and dramatic play.

The first type of play involves "handling materials, touching, smelling, tasting, seeing, hearing, purely for the pleasure gained." (p.182 Wilkinson, 1990) This exploration of sensory pleasure is essential to the development of a child's curiosity.

The gross-motor skill type of play includes all those activities in which a child uses his muscles in more demanding ways and so develops skills through practise. This is a particularly testing play type through which children are constantly challenging themselves.

The third play type (the cognitive skill type of play) is the one in which children can learn about concepts such as colours, shapes, sizes, textures and the nature of the world around them. Needles writes: "It is this kind of learning that has brought man from the primitive world of the nomads to the space age. (p.182 Wilkinson, 1990)

The fourth play type, which Needles describes as "supremely important" (p.182, ibid) is dramatic play. The reason for its 'supreme importance' is that it interrelates with all the others. It is this imagination- and story-based type of play that differentiates human play from animal play. Needles describes it as "the type of play in which children transform themselves and/or their surroundings into something other than what they are. Through interaction with the materials at hand, children put themselves into a world where they are in command, where what they decide should happen does happen." (p.183 1948, Wilkinson) It is therefore through dramatic play that children are transported into another world; one of their own making.



The Hand
(p27, Pallasmaa, 2009)

THE DEVELOPMENT OF PLAY

According to Jean Piaget's theory of the development of children through play



01. Functional Play

At first, a child's play consists of simple muscular activities based on his need to activate his physical organism. He/ she repeats actions and manipulations, imitates them, tries new actions, imitates them, and so on.

AGES: 0 - 2 years old

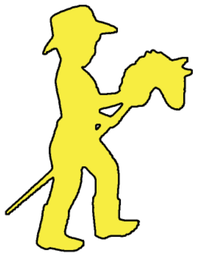
(Wilkinson, 1980)



02. Constructive Play

This form of play introduces the child to creative activity and thereby to the personal joy of creation. He/ she moves from functional activity to activity that results in creation, from the sporadic handling of sand or bricks the child moves to building something from these materials that will remain after he/ she has finished playing.

AGES: 1 - 2 years old



03. Fantasy Play

The child takes on a role. He/ she pretends to be somebody else. While doing this, he/ she draws from first or second hand experience with the other person in different situations. He/ she imitates the person, in action and speech, with the aid of real or imagined objects.

AGES: 2 - 4/5 years old



04. Games with Rules

The child learns to control his/ her behaviour, actions and reactions within given limits. He/ she has to accept prearranged rules and to adjust to them.

AGES: 5 - 7/8 years old

Note: Although these stages have independent characteristics, each builds on the previous stage so that constructive play will also demonstrate a sophisticated form of functional play, fantasy play includes both constructive and functional play and so on.

Following is a visual analysis of children's play in a playground during free play time.

I spent 3 days observing children during free playtime at a nursery school in suburban Johannesburg (Mina Lopato Nursery School). I observed that almost all the children had some element of make-believe in their general play so I set out to record these make-believe games.

The following study illustrates 3 of these games:

01. Fire and Snow Queens
02. Captain Hook
03. Mommy, Daddy, Baby

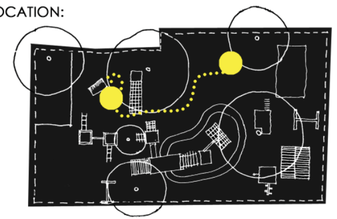
Please refer to Appendix A for a summary of the additional games that I recorded.

01. "Queen Fights"

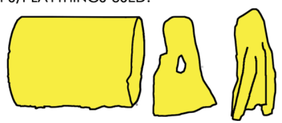
Four girls want to play together. Two decide they will be queens and the other two want to be their puppies. One girl wore a white 'bomber' jacket to school and so decides to be a Snow Queen, using her jacket as a prop. The other is wearing a red hoodie and so decides to be a Fire Queen.

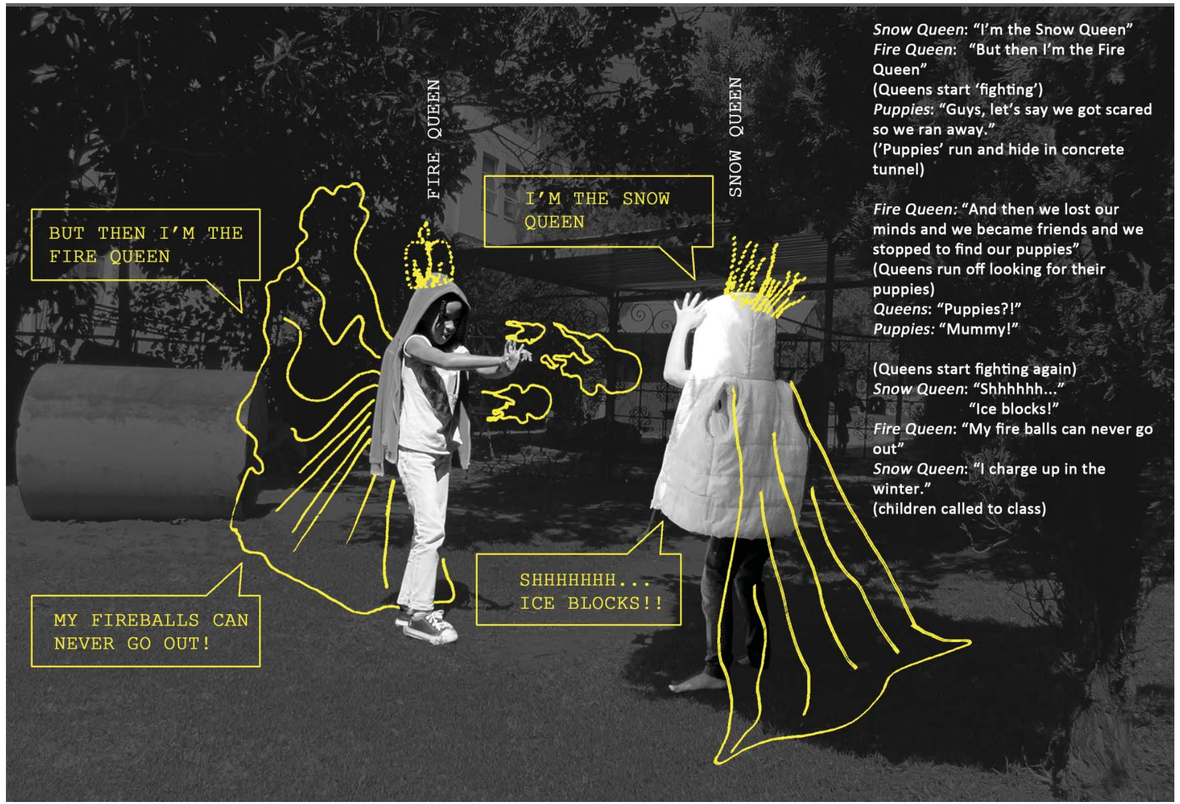
This game is an example of high fantasy play drawing from fantasy movies or novels the children have been exposed to. The queen's roles are created very logically through the items they wore to school. One of the puppies tends to use dogs in all her imaginary play and so creates her role through a very strong interest of hers. The game is acted out all over the playground using only a concrete tunnel as a hide-out and the queens' jackets as magic wands. It is an incredibly interactive game where the suggestions of all its participants tranform the game as it continues.

LOCATION:



PROPS/PLAYTHINGS USED:



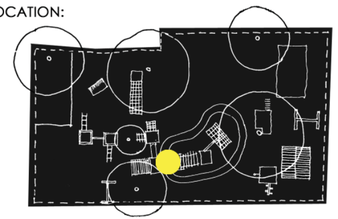


02. “Captain Hook”

This child was observing other children playing below the jungle gym saying to himself “I’m Captain Hook”. He appeared to be saying this in order to get other children’s attention, however nobody responded.

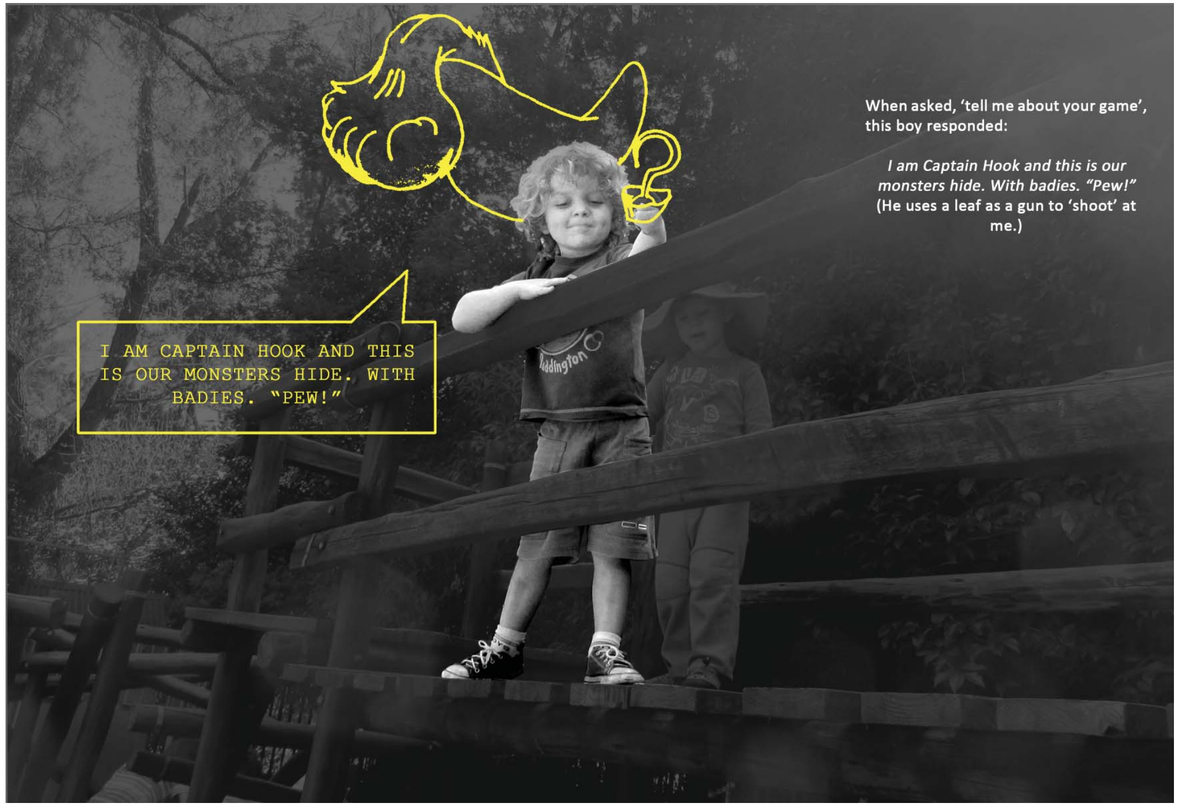
For this child, he did not play a prolonged game of make-believe but even in watching other children playing, he imagined himself to be something other-worldly. Another child was on the same jungle gym, however, they were not playing together. When the boy pretended that a leaf is a gun, he was displaying a common element of symbolic play according to Jean Piaget: where commonplace materials are substituted for the real object. Instead of finding a real gun, he uses a leaf onto which he projects his imagination. The jungle gym, too, is transformed through his imagination into a ‘monster hide’, where he logically imagines ‘baddies’ to hide.

LOCATION:



PROPS/PLAYTHINGS USED:





When asked, ‘tell me about your game’, this boy responded:

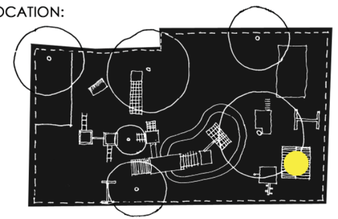
I am Captain Hook and this is our monsters hide. With badies. “Pew!”
(He uses a leaf as a gun to ‘shoot’ at me.)

03. “Mommy, Daddy, Baby”

Three children are playing “Mommy, Daddy, Baby” in the play house. They sometimes wander around the playground but always come back to the playhouse as their base. After a while, one child decides she wants to switch roles and then the game continues with new roles.

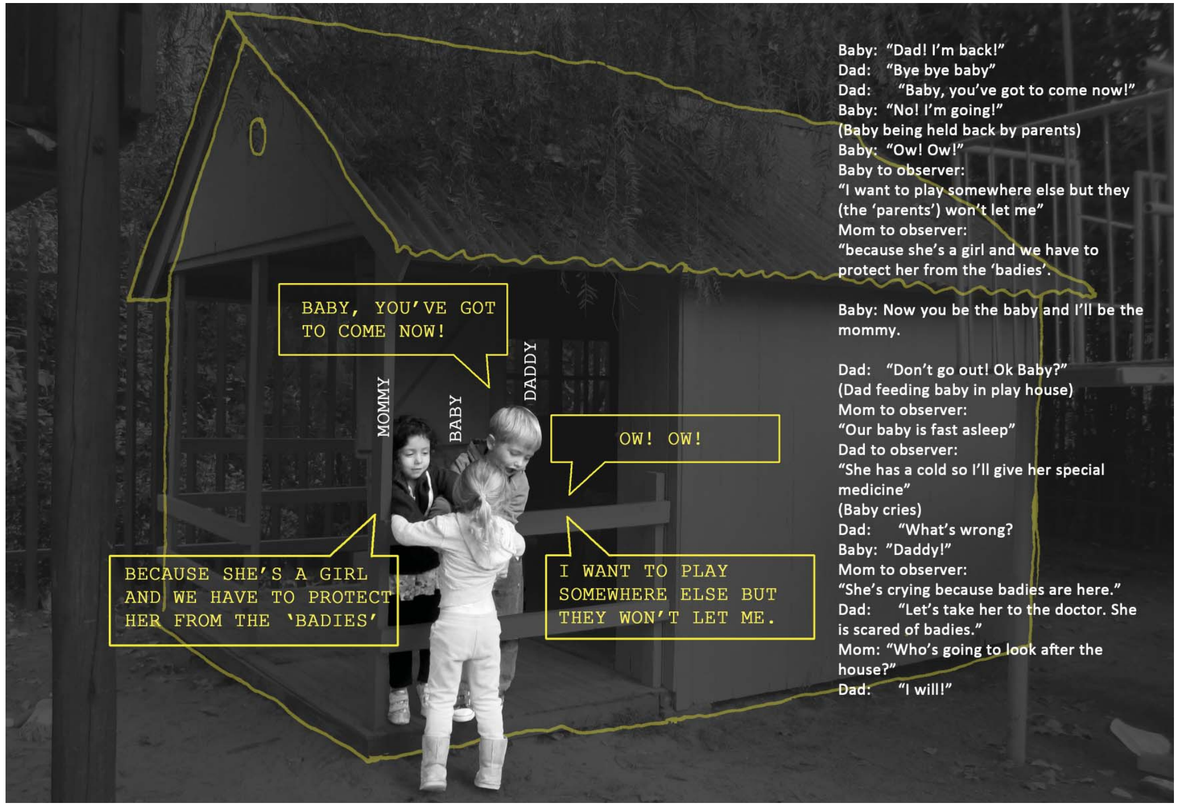
These children are only 3 years old and so draw on their familiar experiences of the home. It is an example of imitation play where they use actions and speech that they have heard from their parents. This form of play also helps children act out their fears and overcome them (such as being afraid of the ‘baddies’). Piaget calls this compensatory play. This game requires a realistic prop (the play house) to initiate the children’s imaginations, however when other children intrude in their space, they easily integrate them into their story as the ‘baddies’, portraying a kind of flexibility that is central to fantasy play.

LOCATION:



PROPS/PLAYTHINGS USED:





Baby: “Dad! I’m back!”
Dad: “Bye bye baby”
Dad: “Baby, you’ve got to come now!”
Baby: “No! I’m going!”
(Baby being held back by parents)
Baby: “Ow! Ow!”
Baby to observer:
“I want to play somewhere else but they (the ‘parents’) won’t let me”
Mom to observer:
“because she’s a girl and we have to protect her from the ‘badies’.

Baby: Now you be the baby and I’ll be the mommy.

Dad: “Don’t go out! Ok Baby?”
(Dad feeding baby in play house)
Mom to observer:
“Our baby is fast asleep”
Dad to observer:
“She has a cold so I’ll give her special medicine”
(Baby cries)
Dad: “What’s wrong?
Baby: ”Daddy!”
Mom to observer:
“She’s crying because badies are here.”
Dad: “Let’s take her to the doctor. She is scared of badies.”
Mom: “Who’s going to look after the house?”
Dad: “I will!”



[VS]



(above) *Bauhaus Bauspiel* by Naef Toys
(www.connox.com)

(below) a modern toy ship
(www.hoopersstores.com/)

Through this research, I observed that most of the children had some element of make-believe even if not directly engaged in play themselves. The children's imaginations were stimulated by abstract elements, such as the jerseys two girls were wearing initiating a game of fighting Queens or a lump of sand in a child's skirt reminding her of a baby that needs to be put in its cradle.

All fantasy games were drawn from real life experiences (imitating the things mum or dad say in a game of "Mommy, Daddy, Baby") or from books and movies children had been exposed to (for example, "Captain Hook"). The children tended to use the whole playground, sometimes wandering around much of the space during one game. The physical features and play equipment seemed to initiate and aid their play more than toys, however the toys engaging movement such as motor bikes, were very popular with the boys. Most children could project their imaginations onto any inanimate object to suit their game's purpose. In this sense, it helped to have elements that could engage the children's creativity. Often the elements with a less clear function were used the most.

vi. THE WORLD OF TOYS

It is particularly within this realm of dramatic play that toys are transformed from objects into characters, and, as Carl Fox, author of *The Doll* argues, that toys as characters transport us into the imaginary world of dramatic play. He writes: "Perhaps the greatest single attraction of the doll is its almost magical power to engulf the viewer and lift him out of himself into the doll's world-whatever it may be." (p.5 Kuznets, 1994)

Piaget and others have observed that objects encourage the earliest fantasy play. It is through the toys and other materials a child has at hand that his imagination is first ignited. In early infancy, toys provide important sensory experiences. Later on, the same toy (such as a teddy bear) may become the child's companion. The teddy will have transitioned from being a cuddly object to a living companion, often endowed with human feelings or attitudes. It is a simple yet important step in the beginnings of a child's make-believe.

"The availability of at least some toys at a relatively early age should undoubtedly enhance the likelihood of make-believe play for the young child by providing additional complex stimuli which can be part of the assimilation process when the child is alone. Obviously toys that involve some resemblance to living objects are especially helpful since they require less of a great leap of the child and have an immediate attraction for it." (p.238, Singer, 1973) This 'great leap' describes the process of engaging one's imagination. It also shows how early on, a toy has the ability to ignite a child's imagination and form pathways in his brain for further make-believe. For a child whose imaginative abilities are not strong, a realistic-looking toy (with which he can make easy associations) can help him in the transition from the real world to the fantasy world of play. For that child it will be easier to re-enact realistic scenes that are familiar to him. However, Singer adds: "At the same time it seems generally the case that the favourite toys of young children are not excessively specific in their function. It was this kind of observation that prompted the suggestions leading to the research by Dr Pulaski ... The toys that are clung to most and last the longest for children of toddler and preschool age tend to be dolls or stuffed animals." (p.238, ibid)

This leads on to the discussion of realistic versus abstract toys. The sad reality for children today seems to be the overwhelming bombardment of colourful yet unimaginative toys. Today's children are 'play illiterates' and consumers of images of other people's first hand experiences. Mary Ann Pulaski writes: "In the movies, on television, and in their toys, they are provided with the utmost in prefabricated materials... [C]hildren today have dolls as well-dressed and sophisticated as Vogue models, and war toys so realistic as often to be gruesome. Nothing is left to the imagination; thus, it is conceivable that imagination and fantasy may decline in some groups for lack of practice. Singer has raised the intriguing question of whether realistic toys might not actually impede fantasy development" (p.75 Pulaski, 1973) As observed in my study of the children's play at Mina Lopato Nursery School, the simplest of props or playthings inititiated the children's imaginary play.

While individual toys make contributions to a child's overall development and many are designed specifically for educational purposes, a toy cannot be separated from its context. Many theorists discuss the importance of a child's environment and it would seem that the total environment in which a child grows up is more fundamental to his learning and growth than individual toys in particular. The toys are simply an integral part of that environment. "Playthings form a part of the environment and culture in which they are used. Their ability to arouse interest and to activate the child to action depend, in addition to the inherent interest of the thing itself, on other playmates, the environment and the culture. The environment also influences the content of the activity, the direction and its intensity." (p.258 Somataa, 1980)

In addition, toys are given their meaning within the environment they find themselves in. For example: "A toy reindeer in the hand of a small Lapp boy in the midst of Lapland's roadless backwoods sparks different thoughts and actions from the same object in the hand of an American boy on the 35th floor of a skyscraper in new York. A red toy ball in a shining white hospital room emits stimuli which differ significantly from the meaning which the same object receives in the centre of a playroom full of playthings or in the centre of a group of boys in a green field." (p.258, Somataa, 1980) In this case, the power of the toy is reversed. Instead of what Carl Fox described as the toy's ability to draw one into their world, so too does the real world or the world of a child's imagination have the ability to draw the toy into it.

As stated, earlier, Lewis Carroll put on puppet shows for his younger siblings with the older ones acting them out with him. According to Angela Shofield (1978), puppets were among the earliest toys. They were used to act out a story for the entertainment of both the puppeteers and the audience through an act of play. The scenes were a miniature depiction of reality (or fantasy) just as many toys are for the children who play with them.

So, we see that the distinctions between the worlds of play, toys and narrative therefore are also unclear. A toy, for example, can hardly exist as a toy unless it is played with and thus made a part of a child's world of play. Play is equally dependent upon toys when the toy itself initiates play. And most games of fantasy play must involve some form of narrative that holds together the game and the toy through the child's imagination.

vii. IMAGINATION AND MAKE-BELIEVE

Singer (1973) says that most children by the ages of three or four are aware that their fantasy games are make-believe. When doing my own research on the nursery school playground, a 5 year-old girl was playing 'dogs' with her friend. She said that in their game "there are roses and fairies. But not real fairies. It's pretend." So too is Lewis Carroll aware of the 'pretend' nature of Alice's dream-world. Wonderland is full of play (such as games of croquet and never-ending tea parties) and within these games, every now and again Carroll reveals that his characters are pretending.

After a croquet game with the Red Queen, the King and several others (during which the queen orders so many beheadings that there is no one left to play with), Alice meets the Gryphon:

> "What fun!" said the Gryphon, half to itself, half to Alice.
> "What is the fun?" said Alice
> "Why she," said the Gryphon. "It's all her fancy, that: they never executes nobody, you know. Come on!"
> (p69 Carroll, 1990)

He thus reveals that not only is Wonderland a fantasy world from Alice's dream but a game in which all the characters have a role and play along with Alice. Carroll is aware that games as well as dreams are pretend and exist in a realm beyond reality. In this sense he likens fantasy play to a dream and vice versa.

For Alice, this play-world is an important escape from boredom. Boredom is a modern curse of childhood in particular because a few hours can feel like an age and children seem to have too much energy to sit still for very long. "Children seem more vulnerable than ever to [boredom's] torments, expressing their discontent in that classic demand for attention and distraction: 'I'm bored'". (p163 Tatar, 2009) Singer theorizes that imagination can aid a child in these uncomfortable times. He writes: "In situations of waiting, relative isolation, or where there has been a moderate degree of negative stimulation,... the high fantasy child has available resources that can moderate this impact of the environment without the child having to interact in a committed fashion with the objects or people in the milieu. That is, the high fantasy child can, relatively speaking, create his own private world using a few toys, if they are available." (p220 Singer, 1973)

Before even going into the specifics of Alice's dream we are made aware that she is a 'high fantasy' child as she uses her imagination to keep herself occupied and entertained until dinner. The situation in which she finds herself does not give her much stimulation: Her sister is quietly reading a book without even pictures to excite little Alice and there seems not much else to do. Alice is essentially bored, but not for long. "Walter Benjamin saw boredom as a 'threshold for great acts' and Alice, George, Judy, Peter and Milo – all those literary children who complain about boredom – are soon animated by curiosities and wonders." (p163 Tatar, 2009) With no-one to play with, Alice introduces imaginary characters and so steps from boredom into this world of 'curiosities and wonders'.

THE 'OTHER WORLD' IN ARCHITECTURE

It is therefore through a child's imagination that play, toys and narrative merge in one fantasy world. As Tatar writes: "To children, the characters in books are often more interesting than real-life companions. Rebels and runaways, truants and orphans, they challenge social conventions and aspire to become agents of change. Without doubt, they also inspire imitation and re-enactment." (p21 Tatar, 2009) In Alice's Adventures, Wonderland is a world of fantasy play where playthings come alive and interact on equal terms with humans and animals alike. The narrative carries Alice through her dream-game and holds the pieces together. Wonderland is a fantasy world, a world apart from our 'real' world and yet contains in it many aspects of reality.

In every child's interactions with games of fantasy play, readings of fairy tales or playtimes with imaginative toys, they are transported into a wonderland of their own creating. Here they can master their world, deal with anxieties and interact with people and places they have never seen or heard of before.

It is equally through one's environment, through architecture, that one may find oneself in a unique and interesting world of spatial experiences. As Pallasmaa writes:

> "An architectural work is not experienced as a series of isolated retinal pictures; it is touched and lived in its full and integrated material, embodied and spiritual essence. A profound work is always a world and a complete microcosm. It offers pleasurable shapes and surfaces moulded for the touch of the eye, but it also incorporates and integrates physical and mental structures, giving our existential experience of being a strengthened coherence and significance." (pp137-138, Pallasmaa, 2009, this author's emphasis)

These ideas then also prompt the question of how architecture can enable and encourage the creation of imaginary worlds in children. And equally so, how a building, as a constructed reality, can be an 'other world' for children.

Because of the different types of play, it is necessary to accommodate a variety of spaces and experiences that lend themselves to different uses. It is also necessary, for the purpose of allowing a child to exercise his/ her imagination, to keep the architecture abstract. It may be observed that bright, colourful walls typify children's spaces, however, it is in the mysterious and adventurous spaces (colourful or not) that children truly revel.

With the concept of a building as a toy, it is scale that will make a building toy-like and also bring it down to a child's scale. For a child, part of the importance of play lies in the mastery over the toy and also the mastery over the environment. When scale is brought down, power can be placed in a child's hand. Scale was central to Alice's mastery over *Wonderland* and may also be central to a child's power within a broader park.

It is in this type of environment that a child's imagination may flow and his inner world of fantasies may be projected.

02.

THE CONTEXT OF PLAY

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AIM:
The history of art and architecture in play and playfulness and how that influences design today.



THE CONTEXT OF PLAY: A VIEW OF PLAYFULNESS, THE CHILD AND THE SPACES OF PLAY

"In a society like ours, based on the Protestant work ethic, can we allow ourselves the luxury of focussing on play? Similarly, in our pragmatically oriented culture, what role is there for imagination, which may seem only an idle passing of time, with no immediate, tangible results? And lastly, in our democratically oriented society, what place is there for recognition of unique contributions or for the individual who does not fit the average mold?"
(p1, Lieberman, 1977)

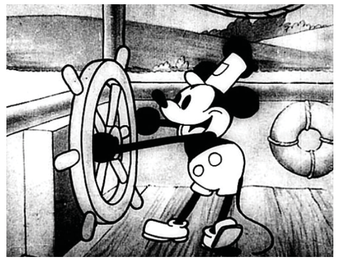
The essence of childhood is play and the essence of play is playfulness.

Playfulness is the connecting factor between play, imagination and creativity. It is that abstract behaviour that can clearly be observed in the play of young children, and later as a personality trait, yet it remains elusive and difficult to pin-point. Developmental psychologist J. Nina Lieberman defines it by the following characteristics: spontaneity, manifest joy and a sense of humour. (p63, Lieberman, 1977) She also describes the artist as a 'practitioner of playfulness'.

This chapter therefore aims to explore the ways in which 'play' manifests in the arts and in architecture. Furthermore, it asks the question: what is the place of play in our world today?



L.H.O.O.Q by Marcel Duchamp: a play on the word which phonetically says "LOOK" but when spelled out in French, also reads as "Elle (L) a ch (H) aud (O) au (O) cul (Q)" meaning 'She has a hot ass'. In the image itself, Duchamp has pencilled in a beard & moustache onto a reproduction of the *Mona Lisa* thus turning her into a bearded lady. (p486, Adams, 2001)



Walt Disney's *Mickey Mouse* (www.wordpress.com)

i. A BRIEF HISTORY OF PLAYFULNESS

The idea of playfulness captured the attention of philosopher, poet and playwright Friedrich Schiller (1759-1805) who wrote: "Man only plays when he is a man in the full meaning of the word, and he is only completely a man when he plays." (p40, Lefaivre & Doll, 2007) A century later it entered the arts as a reaction on the part of the post-World War II artists to the trauma and devastation the war left in its wake. The artistic movement that emerged was "Dada" which is French for a child's wooden horse and also refers to "da-da", the first two syllables spoken by a child. (p.486, Adams, 2001) According to Liane Lefaivre, the Dadaists "sought out the therapeutic, liberating irrationality of play in the wake of the war's deeply traumatic, dehumanising events." (p38, Lefaivre & Doll, 2007) The artist most well-known from this movement was Marcel Duchamp. Although not playful in their appearance, his works were playfully executed and he delighted in puns and word-play.

Since then, playfulness has become a concept central to many major contemporary artists. Austrian artist Erwin Wurm for example, believes that play surely is the basis of civilisation. He says: "sadness is always presented as having imposing cultural importance and I think it is wrong... Playfulness should be taken far more seriously. (p37, ibid) and according to art curator Jerome Sans, "all art is a game." (p38, ibid)

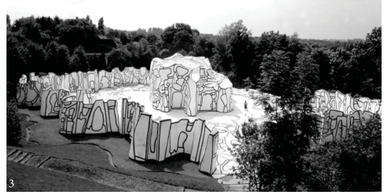
ii. PLAYFULNESS: THE CHILD & THE ARTIST

It was particularly after World War II that children were recognised in political, cultural, economic and domestic spheres. There was a new attitude towards childhood: viewing children as valuable members of society as well as understanding childhood itself no longer as a painful period through which every human had to pass but rather as an important period in itself.

It was around this time (the 1950s) that the child became a powerful force of consumption. Mickey Mouse and his 'home', Disneyland, were created and early evening television was full of advertisements appealing to children in between children's programmes. In cinema, too, "the theme of childhood [became] the subject of ... films like Vittorio de Sica's *The Bicycle Thief* (1948) and ... Jean-Pierre Melville's *Les Enfants Terribles* (1949)." (p46, Lefaivre & Doll, 2007)

Through sculptors and artists, playfulness as a derivative of childhood began to permeate the urban context. It was portrayed in the form of urban-scale installations such as Claes Oldenburg's *Clothespin* (1976) and *Colossal Monument for 42nd street* (1965), Jean Tinguely's *Fontaine de Stravinsky* (1968) and Jean Dubuffet's gigantic sculptures such as *Closerie Falbala* and *Jardin d'email* (1974) as well as playful architectural sculptures from Hans Hollein's *Fit-In Building* (1974) to James Wine's *Best Department Stores* (1970s).

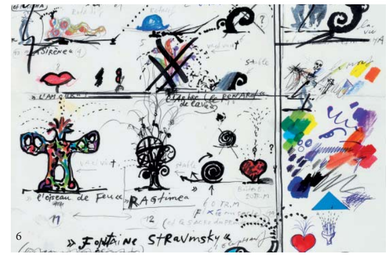






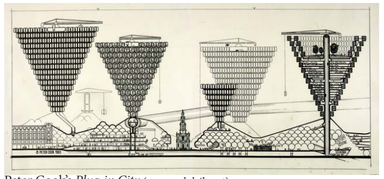
1. *Colossal Monument* by Claes Oldeburg (www.moma.org)
2. *Clothespin* by Claes Oldeburg (p522, Adams, 2001)
3. *Jardin D'Email* by Jean Dubuffet (www.4.bp.blogspot.com)
4. *Closerie Falbala* by Jean Dubuffet (www.almanart.com)



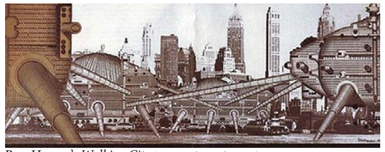




5 & 6. *Fontaine de Stravinsky* by Jean Tinguely (lesvoixdejeanne.com; www.artfinding.com)
7. *'Best' Department Store* by James Wines (www.bombsite.com)

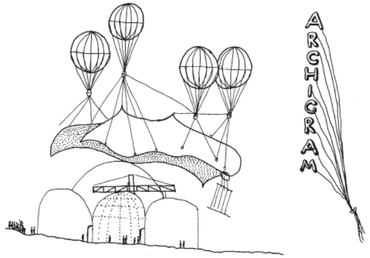


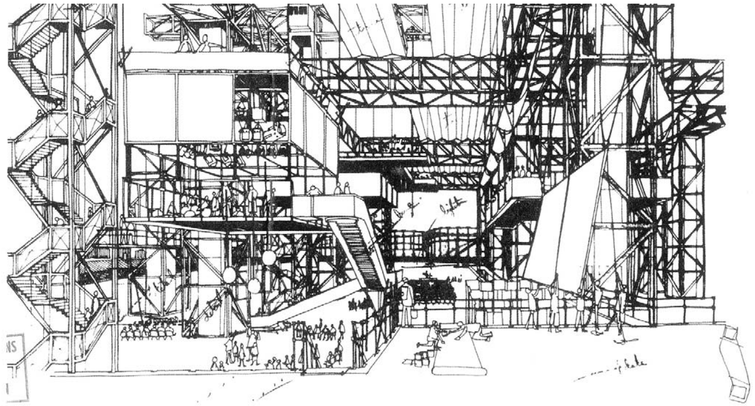
Peter Cook's *Plug-in City* (www.archdaily.net)



Ron Herron's *Walking City* (www.socks-studio.com)

Playful Architecture:





Fun Palace by Cedric Price (www.blogspot.com)

In 1959, British architect and lecturer, Cedric Price, and theatrical director, Joan Littlewood, conceptualised the idea of the *Fun Palace.* "The design reflected the increasing whimsy of post-imperial Britain. A Fun Palace? This was a clear departure from the dullness, conformity and sterility associated with Britain's technocratic welfare state. Price and Littlewood intended the building to be a colossal Dadaist playground for adults... By assembling their own pedagogical and leisure environments using cranes and prefabricated modules [like Tinkertoys] in an improvisational architecture common citizens could escape from everyday routine and serial existence and embark on a journey of learning, creativity and individual fulfilment." (p43 Lefaivre & Doll, 2007)

Archigram, an English avant-garde architectural group formed in the 1960s was inspired by Cedric Price and in turn approached their architecture with playfulness too. Both Ron Herron's *Walking City* and Peter Cook's *Plug-In City* are examples of their whimsical, radical and imaginative thinking. Their cartoon drawings are also reminiscent of a dream world, of something quite 'other'.

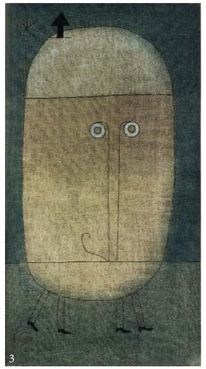
Following the playful Dadaist movement was that of Surrealism which similarly used play as the main compositional principle though now with an added interest in "exploring the imagination and entering the world of myth, fear, fantasy and dream." (p488, Adams, 2001) This child-like world of fantasy characterised the works of artists such as Paul Klee (1879-1940), Joan Miro (1893-1983) and even Jackson Pollock. They portray in some way or another (as the term 'surreal' suggests) a 'higher reality'.

This idea can, in part, be traced back to the 'Child as Artist' movement which appreciated the child's psychic state because it was unencumbered by logic or social preconceptions. According to Mark Dudek: "The reason that the act of drawing reveals such truths and enables the child to express complex emotions in advance of speech development is that he or she can dream over paper and pencil, and communicate spontaneous and therefore authentic 'psychic states'. This then was the important phenomenon of the child as expressive artist." (p52-53, Dudek, 2000)

Heading up this movement were members of the Vienna succession, and artists Joan Miro and Paul Klee. Paul Klee was undoubtedly the first advocate of child art. In his diaries he wrote: "Children also have artistic ability and there is virtue in them having it! The more helpless they are, the more instructive are the examples they furnish us, and they must be preserved from corruption at an early age." (p226, Klee, 1964)

More explicit in their imitation of child's art was the CoBrA group (consisting of artists from Copenhagen, Brussels and Amsterdam) who wrote: "The spontaneous art of children inspired us more than the oeuvre of professional artists." (p47, Lefaivre & Doll, 2007)


1


3


4


2


5

Naive art: 1. *'Doggie'* by a 4-year-old child (author's own)
2. *Birthday Party at my House* by a 5-year old child (author's own)
3. *Mask of Fear* by Paul Klee (p489, Adams, 2001)
4. *Spanish Dancer* by Joan Miro (p490, Adams, 2001)
5. *People Birds and Sun* by Karel Appel of 'CoBrA' (www.tate.org.za)

Finally, even Dutch architect Aldo van Eyck used children's crayons in some of his renderings of playgrounds, thus alluding to the importance of a child-like playfulness even in drawing. Naturally, therefore, the architecture profession followed the world into what has been called "the Century of the Child".

iii. THE CHILD FACILITY : A PLACE OF PLAY

The history of the childcare or early childhood development facility is a long and complex one, going back to the 17th century "when small groups of people in a number of European countries became interested in the moral reform of society." (p30, ibid) They believed that it was through child education that they could bring this about.

A century later, Genevan philosopher and educationalist, Jean-Jacques Rousseau, (1712-78) "rebelled against the pervasive moral atmosphere of prerevolutionary Paris, asserting the beneficial effects on children of an outdoor life." (p30, ibid) Around this time (in 1805) Johann Heinrich Pestalozzi founded the first child-centred institution in Yverdon, Switzerland and a little later, inspired by this project, philanthropist Robert Owen established a childcare institution of his own in New Lanark, Scotland. It acted as a shelter for very young children in the industrial community where their older siblings (from 6 years upwards) and parents worked in the cotton mills.

It wasn't until the 1920s and '30s, however, that these theories on early childhood education manifested in any form of architecture. Even then, the buildings built specifically for the purpose were considered 'iconic' rather than typological and so the majority of child services were housed in existing buildings of negligible architectural quality.

It was the philosophies of Friedrich Froebel in the latter part of the 19th century that properly instigated the development of educational facilities world-wide. His ideas were based on the German philosophy called "Naturphilosophie" which opposed the empirical approach and rather placed scientific progress in the context of a more spiritual world. Hence, Froebel's emphasis was on one's unity and harmony with nature. What was also unique to Froebel's thinking was that child care and education (or the 'kindergarten') should be complimentary to home-life and not a replacement for it.

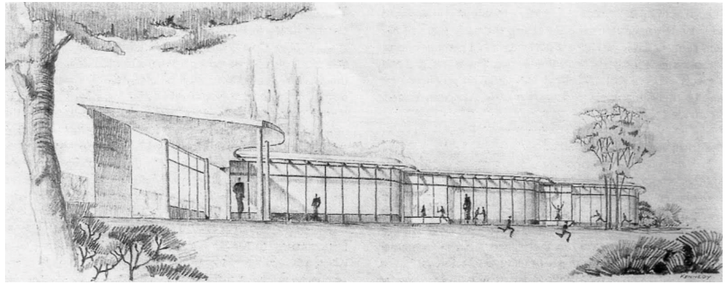
Influenced by Froebel's thinking, in 1913 Rachel and Margaret MacMillan founded the first notable large-scale children's facility in Britain: an open-air nursery school in Deptford, London. Although called a 'nursery school', it focussed on social and medical care rather than education. However influenced they were by Froebel's emphasis on nature, the sisters took a more pragmatic approach by concentrating on fresh air and physical games which they considered to be the basic needs of children. At the time, Margaret MacMillan was almost prophetic in her vision for children's facilities. She wrote: "The school of tomorrow will be a garden city of children; that is to say a place of many shelters - a township, if you will, of small schools built as one community." (p1, Dudek, 2000)

Another influential theorist on child-facility thinking was Rudolf Steiner (1861-1925). According to Mark Dudek, "he founded a spiritual movement based on the notion that there is a world comprehensible to pure thought but accessible only to the highest faculties of mental knowledge. He believed these faculties could be partly brought about by the use of an expressive, organic architectural form." (p33, ibid)

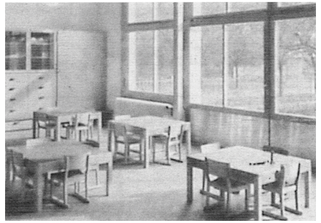
By the 1930s, however, rationalist thinking overshadowed Steiner's romantic theories. As a result of the wars, a 'machine aesthetic' emerged which incorporated kindergartens into its new social forms. Fundamental to this was the use of new materials and innovative technology. The architecture responded pragmatically to the great need for units of accommodation (houses, schools, factories) produced efficiently, economically and in great numbers using prefabrication techniques. This movement in architecture was particularly fuelled by the designers from the Bauhaus. In 1938, Walter Gropius (who was previously a member of the Froebel Society in Germany before moving to America where he became the director of the Bauhaus) designed a nursery school for the Caryl Peabody Trust. Although it was never built, it was particularly significant because of its

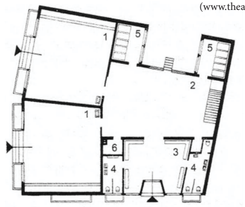


The First Margaret McMillan Nursery School, Deptford, south London
(xiv, Dudek, 2000)

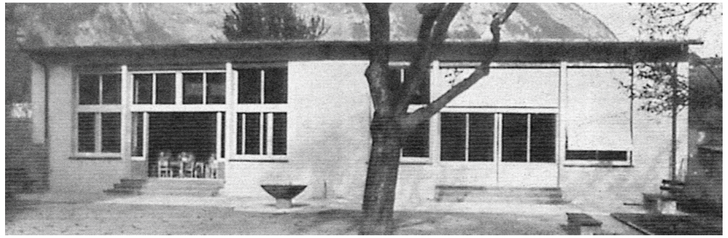


Caryl Peabody Nursery School
by Walter Gropius
(www.thearchitectureofearlychildhood.com)





Nursery School by Hans Leuzinger
(www.thearchitectureofearlychildhood.com)



social programme which established ground rules for designers and educationalists up to World War II.

During this period, several new design considerations came to the foreground. In response to Montessori's ideas about environment and scale, a nursery school in Switzerland designed by Hans Leuzinger of the ABC group, incorporated ergonomically designed furniture for children, with the timber structure seemingly harmonizing with the wooden toys. (p38, Dudek, 2000) This came from Montessori's theories of the importance of a child's environment and the *scale* of that environment.

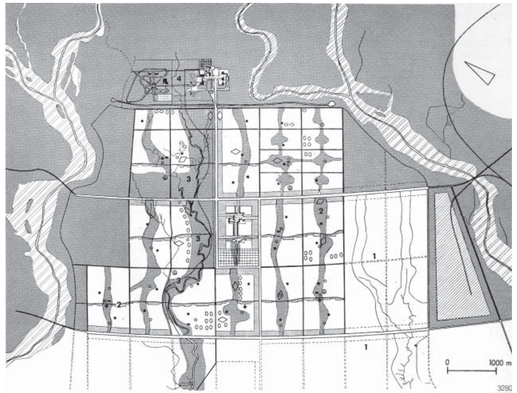
The intentions of the kindergartens of this period reflected the enlightened thinking of the time in relation to preschool facilities, combining the open-air health values of the 19th century with a weightless, machine-made image of the future. Most importantly, however, they held a vision of nursery schools for all.

It was only after World War II, however, that play was understood as an important part of a child's development and that playfulness itself was considered valuable to artists and architects. Until then, the approach had been quite utilitarian.

iv. THE PLAYGROUND: ANOTHER PLACE OF PLAY

The park is and always has been a place of play for children and adults alike. Its history goes back to about the mid-nineteenth century when the *pleasure ground* was developed in America "as a response to the over-crowded, unsanitary conditions of the newly industrialised cities." (p69, Marcus & Francis, 1998) This type of park was modelled on the English manor parks of the Romantic period as an idealised wilderness. In about 1900, *reform parks* appeared. They were also intended to improve the lives of working people, however where the 'pleasure ground' was located on the outskirts of cities, the *reform park* was located in the inner city. This is probably the typology of the 'neighbourhood park' as we understand it today. The *reform park's* primary users were to be "the children and their families of the immediate neighbourhood. Their most important feature was the children's playground." (p69, ibid) It was the beginnings of another kind of 'place' for the child. One may almost call the playground an 'unbuilt children's shelter'.

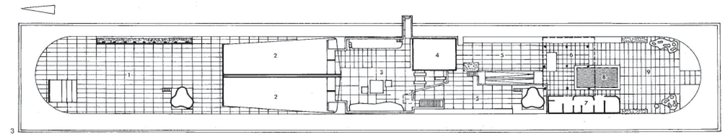
With the new interest in childhood after World War II, some of the greatest architects channelled their creativity to the design of playgrounds. Le Corbusier, for example, "devoted almost one fifth of his plan for Chandigarh to a recreational area" (p48, Lefaivre & Doll, 2007) which he called the "Valley of Leisure". This was a recreational space that ran alongside a natural stream and connected the northern and southern sections of the city. Along



Chandigarh by le Corbusier: showing recreational open space in grey, like veins through the city.
(p33, Ledermann & Trachsel, 1959)

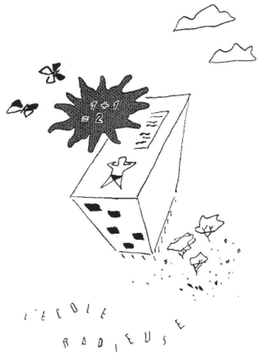


children playing on one of the play sculptures in the *Valley of Leisure*
(daddytypes.com)









Nursery School & playground at Unite d'Habitation

1. *Unite D'Habitation roof plan* by le Corbusier (p62, Ledermann & Trachsel, 1959)
2 & 3. Children playing (p32, Le Corbusier, 1968)
4. sketch of 'play on the roof' concept for the *Unite* (p84, Le Corbusier, 1968)

this space, Le Corbusier designed pathways, an open-air theatre, rallying centres and playgrounds.

Later, on the roof of the *Unite D'Habitation* housing block in Marseilles, Le Corbusier designed a children's playground and nursery school with a paddling pool, an outdoor stage, a sports area and a gymnasium. Le Corbusier asserted the importance of childcare and play in the socially enlightened communities and so intentionally accommodated for it in the scheme.

The most prominent figure for child-centred design however, was Dutch architect, Aldo van Eyck, who is well known for designing over 1000 playgrounds throughout Amsterdam from 1950 to 1970. The Amsterdam playgrounds grew naturally out of unused space and were located only in response to residents' requests. This meant that they blended into public life and thus brought play into people's everyday lives. Van Eyck also designed each playground himself and although he designed by themes, he refused to standardise his playgrounds. He was meticulous about designing the play equipment, making them most suitable and appealing to children. It was important that they be low maintenance and extremely hardy. According to Vincent Ligtelijn (p81, 1999) "the play equipment for the playgrounds was designed bit by bit over the years and subsequently continually amplified, modified and adjusted. Together the items constitute 'families' of elementary abstract forms according to the material used: aluminium, steel, wood or concrete, all of which respond to the basic urge to jump, climb, swing, creep, crawl, hop, stretch, hang, balance, and somersault." Van Eyck's emphasis was therefore on the action of play rather than on the objects or playthings.

In his book *The Child, The City and The Artist.* (1962) Van Eyck writes:

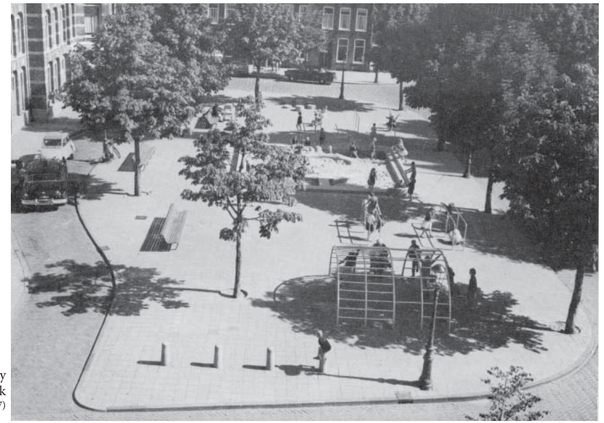
> "What then can the artist do for the child? ... If exploited consciously and on a large scale ... [t]he child will discover an environment adjusted to its proportion and specific frame of mind. In cities, ... it will discover places where it can play as it chooses, paths along which it can run, things on which to climb and exercise the body, material with which to construct, schools and other facilities imaginatively designed, waiting to be imaginatively used."
> (p23 van Eyck, 1962)

I would further add: what can the child do for the architect?

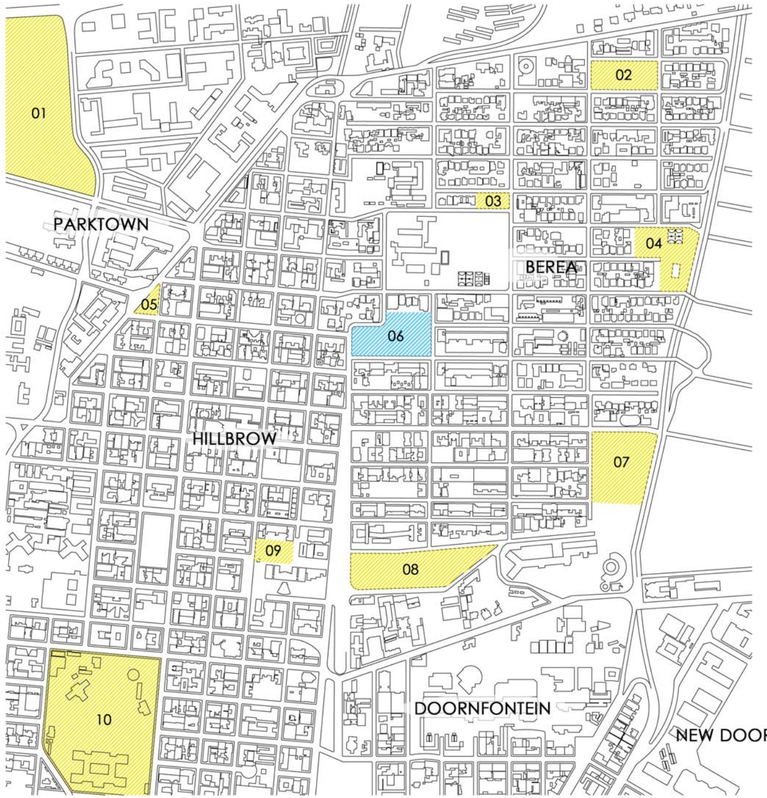
v. PARK-NATURE-BLOOMING CHILD

The playground/ garden has also been central to the spaces of early childhood since their inception. The 'kindergarten', for example, directly means "children's garden" and it is true that nature has been central to its curriculum and design. According to Mark Dudek, "the term 'kindergarten', which originally derived from the notion of the school as a metaphorical garden, alludes to the idea of children as unfolding plants. However, it also brings other analogies to mind, such as the innocence of





Playgrounds by Aldo van Eyck (p114, Hurtwood, 1967)



the parks in Berea/Hillbrow

An introduction to the context of play in the Hillbrow area, Johannesburg

01 **Pieter Roos Park**

02 Mitchell Park

03 Tudhope Park

04 J.L De Villiers Park

05 Edith Cavell Park

06 **Alec Gorschal Park**

07 Donald Mackay Park

08 Pullinger Kop

09 unnamed park

10 **Joubert Park**



Alice peeking into *Wonderland*
(p11, Carroll, 1990)



Barnato Park, Berea in the 1890s (see p53 for full description)
(p16, Benjamin, 1979)

Adam and Eve in the Garden of Eden and the affinity of the young child to the pure spirit of natural phenomena." (p1, Dudek, 2000)

It is widely believed that by observing the changes and growth of natural phenomena, of fauna and flora, the young child will come to an understanding of his place within the natural world. This theory comes from educationalist Jean-Jacques Rousseau (1712-78) whose educational ideal was to provide an environment which defers to nature and thus preserves 'the original perfect nature of the child." (p78, Dudek, 2000)

There is something significant in the fact that both Alice's *Wonderland* and Peter Pan's *Never Never Land* are both natural settings complete with large, blue smoking caterpillars, flowers that talk and ticking crocodiles. Peter Pan flew through the starry night to his tropical island surrounded by dangerous waters. It was his dream world and one where he could play to his heart's content and never grow old. Similarly, after Alice drifted into a deep sleep and fell down the rabbit hole, "she knelt down and looked along the passage into the loveliest garden you ever saw. How she longed to get out of that dark hall and wander about among those beds of bright flowers and cool fountains..." (p11, Carroll, 1990) For both of these child characters, it is through the garden, the natural environment, by which they escape the dullness and difficulties of 'real life', It is also in the garden that they find adventure, 'curiosities' and excitement.

For child psychologists, the natural phenomena provide stimulation which relieves the stress often seen in city-dwellers. In the city, it is the parks that provide the residents with access to natural elements. "A park is often considered an oasis of greenery in a concrete desert. For passersby as well as those who come into a park, its natural elements provide visual relief, seasonal change, and a link with the natural world." (p89, Marcus & Francis, 1998)

In Johannesburg, in 1887, the first open public space was laid out which was called 'Joubert Plain'. It was created in response to an appeal to provide a "public park or garden to be planted with trees." (p166, Brodie, 2008) It is now known as 'Joubert Park' and is situated just south of Hillbrow. During a research project I conducted in 2012, when asked 'why do you visit this park', the most common answer was 'to rest'. The findings were the same from interviews I conducted at Alec Gorschal park. So we see that the users of Johannesburg parks benefit from the contact with nature and hold it in high regard. The open space and connection with natural elements are key to both the children's and adults' well-being. Furthermore, because the nature of the urban fabric in Berea/ Hillbrow is such that people do not have private outdoor space (like the suburbs do) the parks become an important space for children to play, parents to socialise and for both to relax.



THE CHILD, PLAYFULNESS AND ARCHITECTURE

One can therefore observe that playfulness came into its own particularly after World War II and continues to be valued today in art, architecture and particularly in designing for children.

There is a reciprocity between art/ architecture and play where aesthetic imagination is first inspired by play and then architecture plans for the play which initially inspired the art. This project aims, too, to be inspired by the playful world of children and in turn, inspire playfulness in people through their interactions with the space.

This chapter raises the question of whether there are different degrees to which playfulness can be carried through in the architecture? Playfulness may be presented in the formal language of the building, in the aesthetic, in the detail and in the way in which it engages its users in experiencing its spaces. This project therefore aims to include playfulness in its design: in the way the building sits in its context, in the way one circulates through and interacts with the building and in the way that the details encourage play.

03.

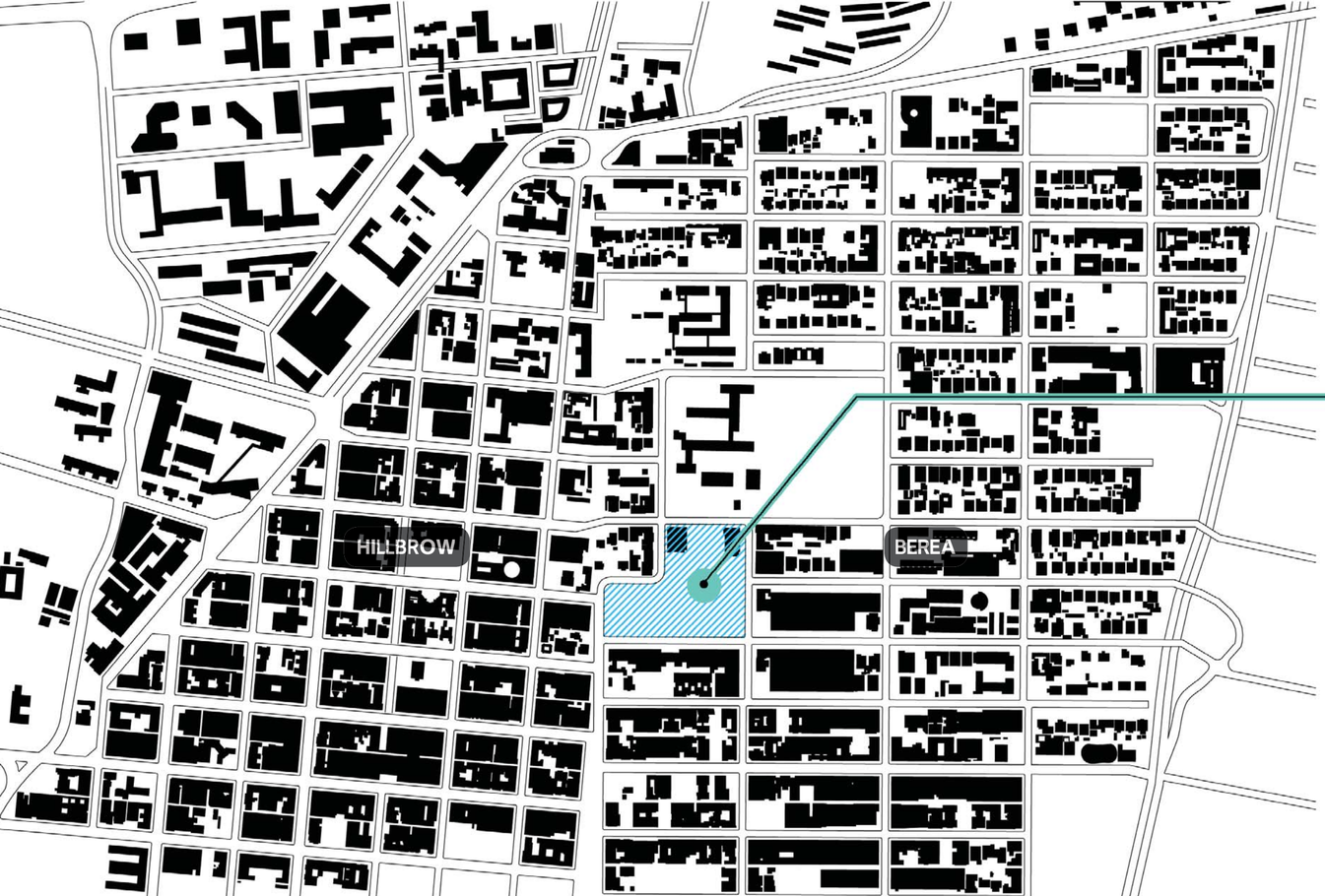
A PARK IN BEREA

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The Duty of Architecture in the lives of Berea's children	73

AIM:
To understand the context and issues in which I am designing as well as a brief history of Berea

selected site



ALEC GORSCHAL PARK:
(IN BEREA)

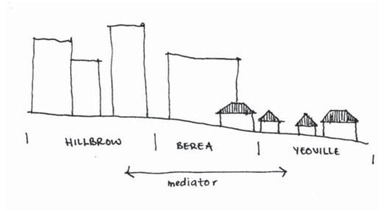
... a well-used neighbourhood park frequented predominantly by local residents or visitors staying nearby. It is used as a thoroughfare between Hillbrow and Yeoville and therefore also receives a lot of pedestrian through-traffic. It is just north of this site (now the Barnato High School) that Berea's first recreation ground (created by randlord Barney Barnato) was situated. Many children also use the park to play and young mothers bring their infants for a break.

(BASED ON THE FOLLOWING CRITERIA)

- close proximity to schools
- an area with a need for public space
- dense residential area
- highly populated







(Above) *St Jose, cnr Lilian & Olivia Rd*
(p114, Chipkin, 2008)
(Opposite) *Barnato Park, 1896*
(www.old-print.com)

i. historic context

Alec Gorschal park is located at the center of Hillbrow and Berea, historically the primary residential neighbourhoods of inner-city Johannesburg. According to architectural historian, Clive Chipkin, "the area began as a late 19thC residential appendage of the historic inner city on the plains but topographically separated by the rising ground..." (p401, Chipkin, 2008)

Berea began in 1895 as a middle-class suburb consisting of single-storey houses with corrugated iron pitched roofs with one exception: Barnato Park estate owned by the illustrious randlord Barney Barnato. In is interesting to note that Berea began with a large 'recreational ground' or park at its center. These beautiful gardens were laid out by Barney Barnato and they were open to the public. According to Benjamin: "the original five-hectare park was elaborately laid out with lawns, statuary, shrubberies, a 'Ladies Mile' for riding and a lake big enough for boating." (p16, Benjamin, 1979)

Such was the state of the residential suburb until the 1940s when, during the post-war boom, architects and planners looked to Hillbrow to develop high-rise apartment blocks. According to Beavon, "The designs of the new apartment buildings in Hillbrow were characterized by projecting reinforced-concrete frames filled in with brick panels, and partly plastered in pale colours. The facades were completed with horizontal windows, and recessed or rectangular projecting balconies." (p155, Beavon, 2004) These buildings were constructed and leased at a high speed and this resulted in a highly stylish, modern and relatively uniform neighbourhood. The surrounding suburbs of Berea and Yeoville escaped much of the high-rise development due to town planning restrictions. Berea, however, did not entirely escape from 'spill over' apartment blocks, which has resulted in a mixed neighbourhood of superblocks juxtaposed with single-storey houses. Berea, therefore, seems to act as a mediator between high-rise Hillbrow and low-rise Yeoville.

In its heyday (from the late 1950s to late 1980s) the broader Hillbrow area was a "transit zone for the newly married, upwardly mobile." (p401, Chipkin, 2008) However, by 1979, the area began to decline. Landlords, battling to find tenants, allowed Indian and Coloured people to illegally move into their buildings. In 1982 when Africans followed. According to Beavon, "the majority of African people desperate for their own decent accommodation were, by contrast, by virtue of the Apartheid system, members of the working class... They sought out the cheapest possible accommodation

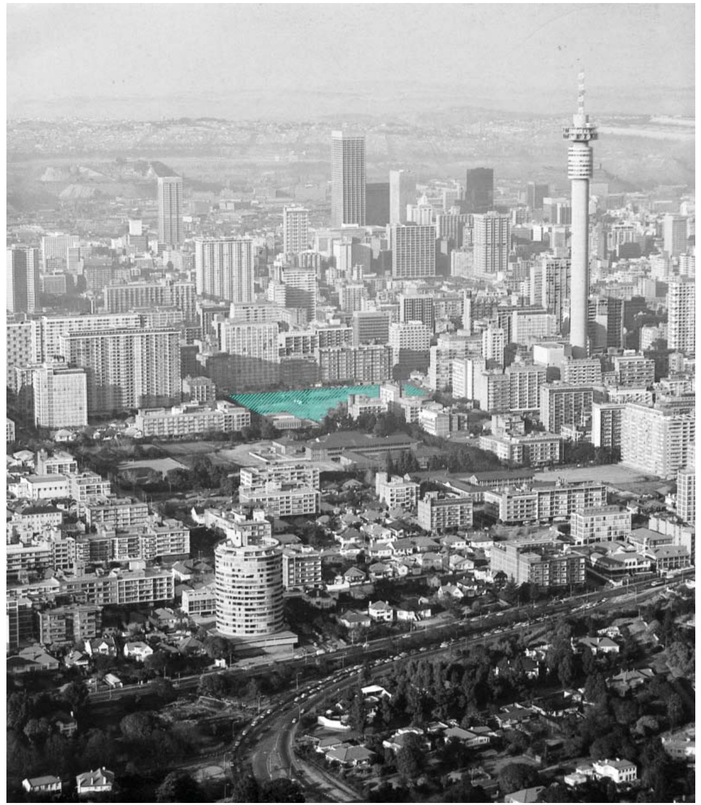


fig 03.
The stylishly unifrom and modernist neighbourhood of Hillbrow and Berea, sometimes called "Little New York". Alec Gorschal Park is indicated in blue with Barnato Park high School below it: the two open spaces amidst a concrete jungle, taken in 1975. (p96, Hughes, 1978)

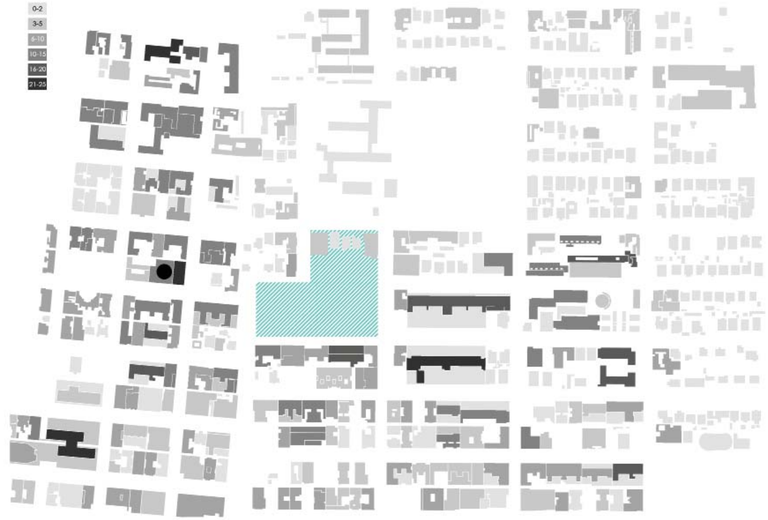


fig 02.
Heights of buildings surrounding Alec Gorschal Park, 2013: higher to the south-west, on the Hillbrow side and mainly single storey to the north-east, on the Yeoville side.

that was available, and found it in a variety of places. For some it was the oldest and already deteriorating apartment houses; others found shelter in vacant office space that could no longer be let out such as empty factory buildings, and in a number of other nooks and crannies. In the wake of the new arrivals came the hawkers, who set up virtually permanent stalls on adjacent pavements, from where they sold small punnets of fruit and vegetable and other low-cost items needed for everyday living by the new residents." (p221, Beavon, 2004)

Crime also increased with a growing population of illegal immigrants. It was mainly drug-related crime and by the late 1990s, the rate of serious crimes being committed was particularly high. "Some 1800 serious crime incidents per month were being recorded in the early part of 1997. Twenty murders and as many rapes in a month were apparently not unusual." (p246, ibid) Berea, separated slightly from Joubert Park and Hillbrow by the ridge, remained relatively safe.

It must be noted that this does not speak of an environment fit for children. The area was designed, from the start, for young couples and students. In addition, the public space required for such large numbers of residents was not provided for and so we see a dramatic shift from an area that began as a low-rise suburb with large recreation gardens, to a concrete jungle with little open space.

> The architecture too is strangley exciting. Notwithstanding the intended individualism of the buildings, a certain unity has resulted. This unity derives from the standard 50 cape feet x 100 cape feet size of erven with the same height restrictions, identical planning requirements, standard steel windows, the same architectural reference (the plastered surround derived from the Martienssen house) and the use of the cheapest most effective cladding material requiring no maintenance - the facebrick. This is the so-called Hillbrow vernacular - another indigenous Johannesburg form. Its heyday is now past. The plastered frame is dead.
> (p402, Chipkin, 2008)



A child calling to her friends in Alec Gorschal Park from a 16th-storey window: her home.

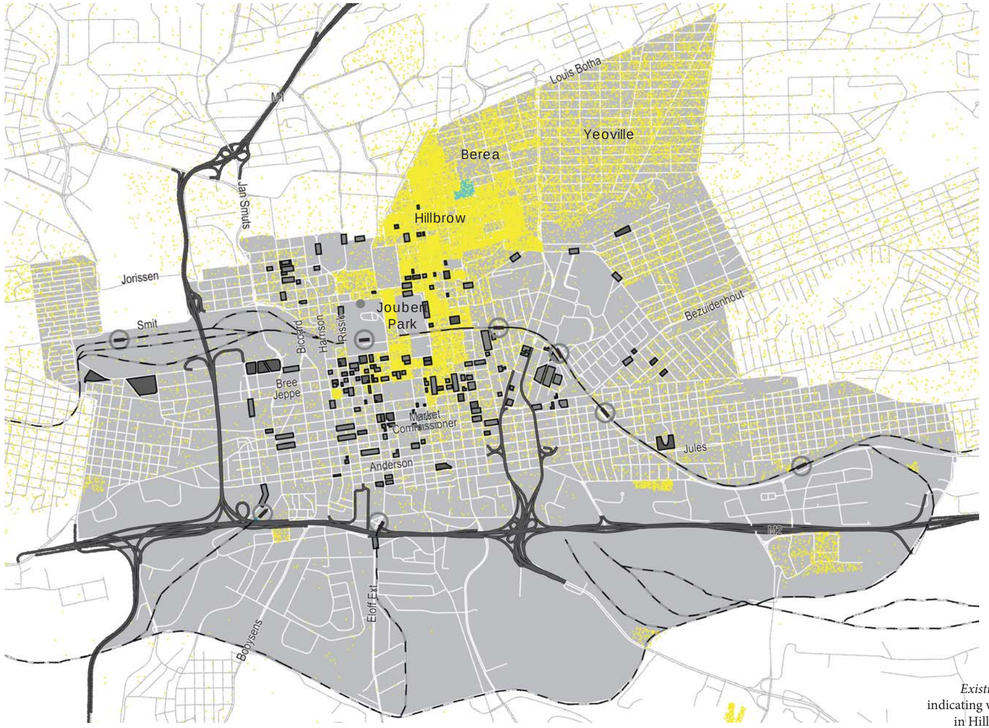
ii. current contexts

Today, Hillbrow and Berea are very much the same as they ever were. Residents cannot afford to renovate their homes and landlords have remained aloof. This has resulted in an area architecturally frozen in the 1970s but showing layer upon layer of degradation from the last 40 years. Yet according to the Johannesburg Development Agency in their 2011 *Joburg Inner City Urban Design Implementation Plan*, "Despite common perceptions, Hillbrow and Berea are fundamentally worthwhile mixed-use residential areas that continue to thrive despite neglect." (p54, JDA, 2011)

This population consists mainly of immigrants. In this sense, Hillbrow is still a transient community and often acts as the 'gateway' into Johannesburg, the first home for both legal and illegal African immigrants.

Socio-economically, Hillbrow and Berea have many sub-cultures and the "population is made up of lower income, young, both poorly educated and well-educated ... people with a large number of visible urban poor." (p54, ibid) There are also many more families living in the area with a large population of young children and mothers. Crèches are therefore in high demand.

Although crime is not as high as it was in the 1990s, it continues to be a worry for residents. In 2012 Hillbrow was placed second of the top ten worst precincts in Gauteng for 'Total Crimes' reported. On the same note however, residents say that while one has to be vigilant (like in any district in Johannesburg) the Berea/Hillbrow area is not a 'no-go' zone as outsiders perceive it to be.

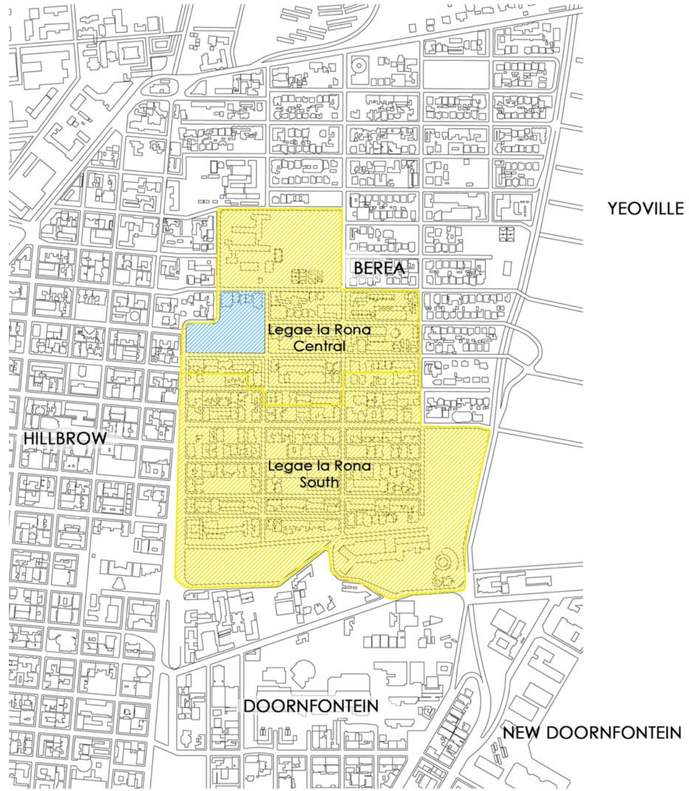


Existing Housing in Johannesburg indicating very high density residential in Hillbrow and Joubert park with medium to high density in Berea
(p43, JDA, 2011)

CID

As a result of the degradation and crime, however, a City Improvement District (CID), called 'Legae la Rona,' meaning 'Our Place' has been implemented in a portion of Berea. It is the first residential CID in Johannesburg and was initiated by building owners in an effort to to halt urban decline and to improve safety and security. The CID is split into two portions: *Legae la Rona Central* and *Legae la Rona South*. The first is a legislated CID and is almost 100 percent residential. It is also within this area that Alec Gorschal park is situated. In general, this initiative has been a positive one. Streets in Legae la Rona Central are evidently cleaner and security vehicles can be seen driving around the area. Alec Gorschal park, however appears to be over-looked in terms of general maintenance and security and the CCTV cameras that were promised on every street corner have not yet been installed.

The area of the Legae la Rona central improvement district indicating that Alec Gorschal Park falls within the 'central' region



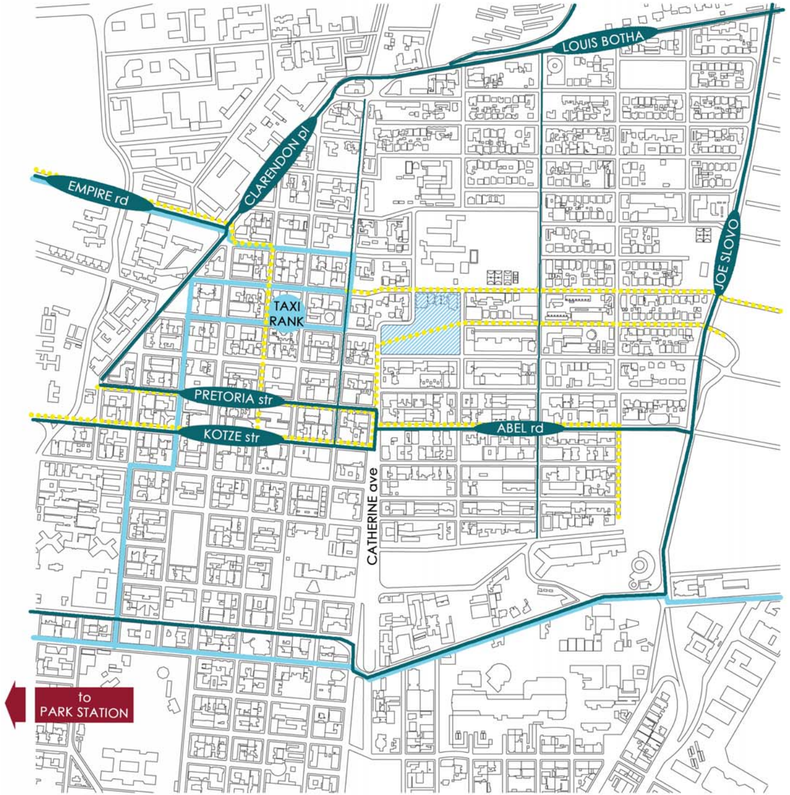


Diagram shows the different movement routes in Hillbrow and Berea and therefore displays the connectivity of Alec Gorschal Park

Vehicular movement

Bus & Taxi routes

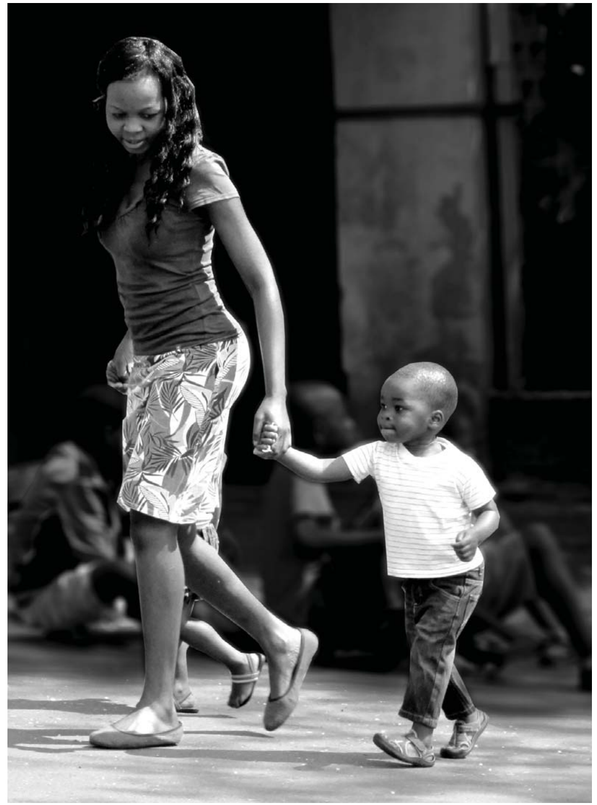
Pedestrian movement

Railway

movement

On a broader scale, Berea and Hillbrow are bordered by three major roads: Joe Slovo Drive, Louis Botha Ave and Clarendon Place with Empire Road feeding into it. All these are major taxi and bus routes. Abel Road acts as another major vehicular access road into Berea/ Hillbrow from Yeoville. Pretoria and Kotze str are the major shopping streets in Hillbrow resulting in extremely high traffic (both vehicular and pedestrian) along them. In addition, they are both one-way roads, resulting in dangerously fast traffic. Berea/ Hillbrow is also close enough to Park Station that people may walk there to catch a train for longer distance travel.

Separated from Hillbrow by Catherine Ave, Berea's streets are quite different. With far less commercial activity, and larger city blocks, there are fewer cars on the roads and less congestion. The majority of Berea's (as well as Hillbrow's) residents choose to walk and their transportation expenses are relatively low due to the area's close proximity to economic opportunity. (p54, JDA, 2011) When conducting research in Alec Gorschal, I found that every person I spoke to had walked there. Because the major vehicular routes for Berea are situated predominantly on the periphery, the neighbourhood is more pedestrian friendly and therefore more child-friendly too.



A mother and her children walking through the streets of Hillbrow (taken on Barnato Str)
author's own

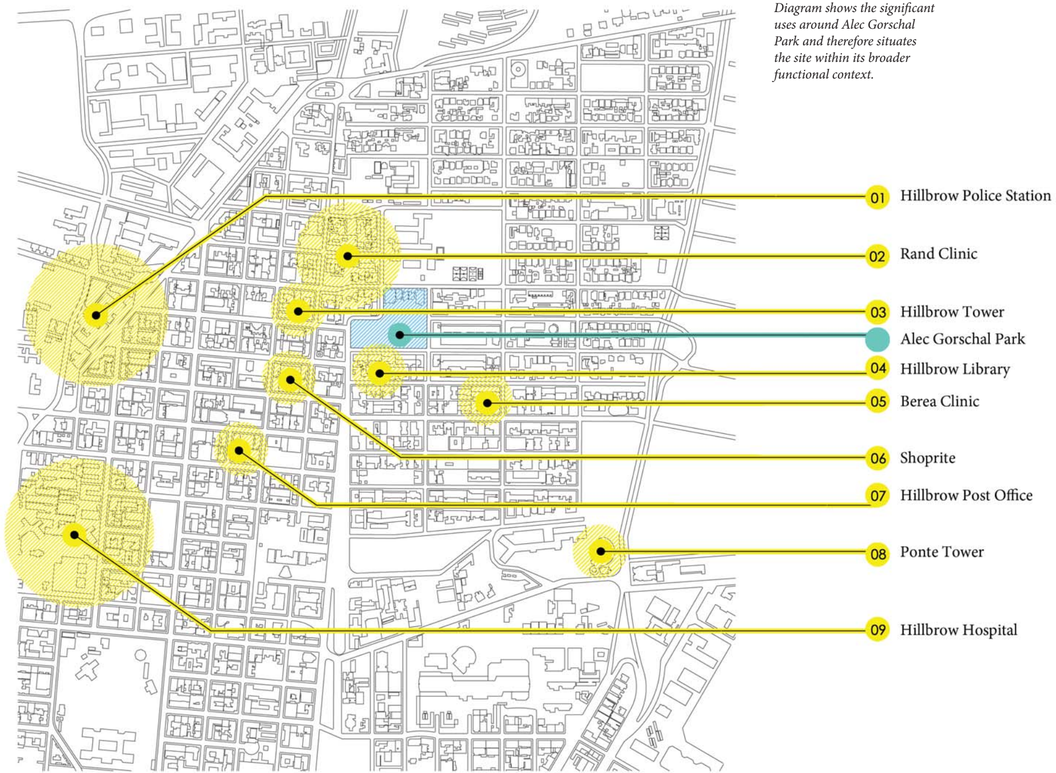


Diagram shows the significant uses around Alec Gorschal Park and therefore situates the site within its broader functional context.

key locations

Hillbrow and Berea, are, in a sense, self-contained neighbourhoods. Most of the shops residents require are situated in the area. The Hillbrow Police Station, Post Office and Hospital as well as the Berea clinic are all within walking easy distance. Shoprite and Spar seemed to be important to the residents and many of the people using Alec Gorschal Park had just walked from one of those supermarkets. The close proximity of the shopping streets (Pretoria and Kotze str) and clinics to Alec Gorschal Park is significant for my proposed toy library. This is because it would be convenient enough for parents to drop off their children to do their shopping or visit the clinic.

The park is also situated only a street away from one of Johannesburg's most well-recognised landmark: the Hillbrow Tower. As an orienting device, particularly for children, this is another significant structure. Just south of the park is the Hillbrow library. It is an understated building and seems shut off from the vibrant street life of the area. The close siting of the children's toy library to the existing Hillbrow Library (differing from this project's proposal as a service particularly for adults) opens up opportunities for a relationship between the two and a possible campus of schools, libraries and other related facilities to be developed in the area.

(left) A view down Pretoria Street: the major shopping hub of Hillbrow

(right) The Hillbrow Tower as seen from Alec Gorschal Park: a significant landmark and orienting device

both author's own







Parking by British street artist 'Banksy': A commentary on the prioritisation of parking over playspace
(25.media.tumblr.com/tumblr_lgcn6jV5g21qafu4to1_1280)

iii. issues facing city children

"The fact has to be faced that modern civilisation interferes with a hard and heavy hand in the spontaneous play of children. Most of the vast rebuilding schemes in many countries are horrible places, planned without love or understanding... What can be done about it? Much that is charming for children in and around their homes has been destroyed. Most of the shadow and mystery that lend enchantment to children's play have been swept away. Modern homes are hygienic and practical, and so cunningly planned that every corner is utilized. Gone are the private places where a child could create his own world. Vanished are the gardens where he could keep his pets or enjoy his hobbies...

It is too often forgotten, in our brash, practical, modern world, that twilight, shadow and beauty are as important to a growing child as food and air." (p11, Hurtwood, 1971)

This is a quote by Lady Allen of Hurtwood from her book *Planning for Play* first published in 1968. She highlights the unsuitability of modern cities for childhood. Hillbrow, to be sure, is one of these unsuitable areas. The apartment blocks were designed for students and young couples, certainly not for children. Yet as the JDA 2011 report states: "Previously home to predominantly single people, Hillbrow and Berea are increasingly populated by families." (p54, JDA, 2011) Where is the space for childhood in Berea/ Hillbrow? *Gone are the private places. Vanished are the gardens.*

Children will play wherever they go, as Herman Hertzberger says. (p5, 1991) In Hillbrow, the children are in the corridors, on the streets, on the balconies and in the foyers. These can be exciting places, to be sure, however they are limited, needless to say, dangerous. As Hurtwood writes: "Young children, under eight or so, living in high density areas, run two major risks: loneliness and the perils of motor traffic... Cars, lorries and children do not make a good mixture. Traffic is strong and brutal; children are small and tender. They are often hidden in traffic and are unable to estimate distance and speed or understand traffic signs. Yet the street and parking places are often their only playing space." (p12, Hurtwood, 1971) An additional fear of kidnapping and general distrust on the parents' part prevents children from playing outside.

Through the data collected in interviews conducted by this author with the users of Alec Gorschal Park, it was common that the flats in which families live are generally small and over-crowded causing tension between parents and children. The interviewees said that most of the Berea children have their own toys but that they quickly get bored of the toys. It would also appear that with satellite dishes on most, if not all of the buildings in Berea, hundreds of channels on TV have not escaped even Berea. In fact many fathers were proud to announce that they had installed DTSV so that their children could watch the cartoons. Despite their good intentions, however, the sedentary, singular nature of television-watching does not compare in the slightest to the benefits and joys of play, particularly for younger children as explicated in previous chapters.



DSTV stellite dishes lining the facades of housing in Berea (taken on Barnato Street)
author's own

As the imaginative children's writer, Roald Dahl puts it:

The most important thing we've learned,
So far as children are concerned,
Is never, NEVER, NEVER let
Them near your television set --
... Oh yes, we know it keeps them still,
They don't climb out the window sill,
...But did you ever stop to think,
To wonder just exactly what
This does to your beloved tot?
IT ROTS THE SENSES IN THE HEAD!
IT KILLS IMAGINATION DEAD!
HE CAN NO LONGER UNDERSTAND
A FANTASY, A FAIRYLAND!
HIS BRAIN BECOMES AS SOFT AS CHEESE!
HIS POWERS OF THINKING RUST AND FREEZE!
HE CANNOT THINK -- HE ONLY SEES!
'All right!' you'll cry. 'All right!' you'll say,
... What shall we do to entertain
Our darling children? Please explain!'
We'll answer this by asking you,
'What used the darling ones to do?
...They'd READ and READ,
AND READ and READ, and then proceed
To READ some more. Great Scott! Gadzooks!
One half their lives was reading books!
... So please, oh please, we beg, we pray,
Go throw your TV set away,
And in its place you can install
A lovely bookshelf on the wall.
...And once they start -- oh boy, oh boy!
You watch the slowly growing joy
That fills their hearts. They'll grow so keen
They'll wonder what they'd ever seen
In that ridiculous machine,

And later, each and every kid
Will love you more for what you did.

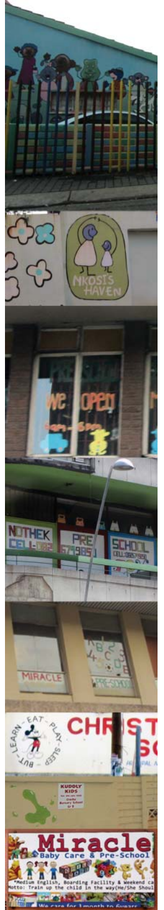
A mapping of crèches in Berea/ Hillbrow



KEY: ✱ Creches accommodated in upper floors of commercial buildings ▷ Creches accommodated in free-standing houses with access to come form of open play space















The crèches in are equally problematic. 73% of the Berea/ Hillbrow population is employed (p54, JDA, 2011). This means that with the majority of the population working, (many of whom are single mothers) crèches and day care centres are a much needed service. There are already a large number of crèches in Berea, however, according to the 2011 JDA report: "There is an inadequate number of social and community services such as ... schools [and] crèches to support the residential densities." They also say: "As the residential population of the inner city as a whole grows and as the inner city is increasingly occupied by residential uses, the need for the externalities that support housing environments is exacerbated... An increasing need is found for affordable facilities for Early Childhood Development to support single mothers" (p55; 25, ibid)

In addition, the environments of those crèches are, at best, superficially attractive. Similar to the early kindergartens mentioned in the previous chapter, crèches in Berea and Hillbrow are accommodated in existing houses or in commercial buildings in response to the need for working parents to have day care for their children. These have not been purposefully designed for children and in most cases facilities are inadequate for human use, let alone child use. These services are therefore more for the purpose of 'babysitting' children while their parents work, rather than providing educational facilities concerned with the children's development. When I spoke to a teacher from Berea Preschool, she was aware of the necessary activities for children's development but



A class of young children seated for the start of 'school' that day with their teacher standing at the door (at Berea Pre-Primary)
author's own

she informed me that they do not have enough resources or money in order to fulfil those developmental needs. I observed that there were no toys in the building except for four stuffed teddies positioned on the mantle piece. According to the teachers, children also do not bring their own toys to school because they fight over the toys when they do, which often results in breakage. On top of this, many of the teachers are not qualified or they are studying through Unisa without the certainty that they can afford to complete their studies.

This is problematic for children as the early years are the very foundation of life. According to a report of the United States National Education Association:

> "Research shows clearly that the first four or five years of a child's life is the period of most rapid growth in physical and mental characteristics and *of greatest susceptibility to environmental influence.* Consequently, it is in the early years that deprivations are most disastrous in their effects... Experience indicates that exposure to a wide variety of activities and of social and mental interactions with children and adults greatly enhances a child's ability to learn. Few homes provide enough of these opportunities... The need is for a complement, not an alternative, to family life. But the need is compelling." (p11, Hurtwood, 1971, empashasis added)

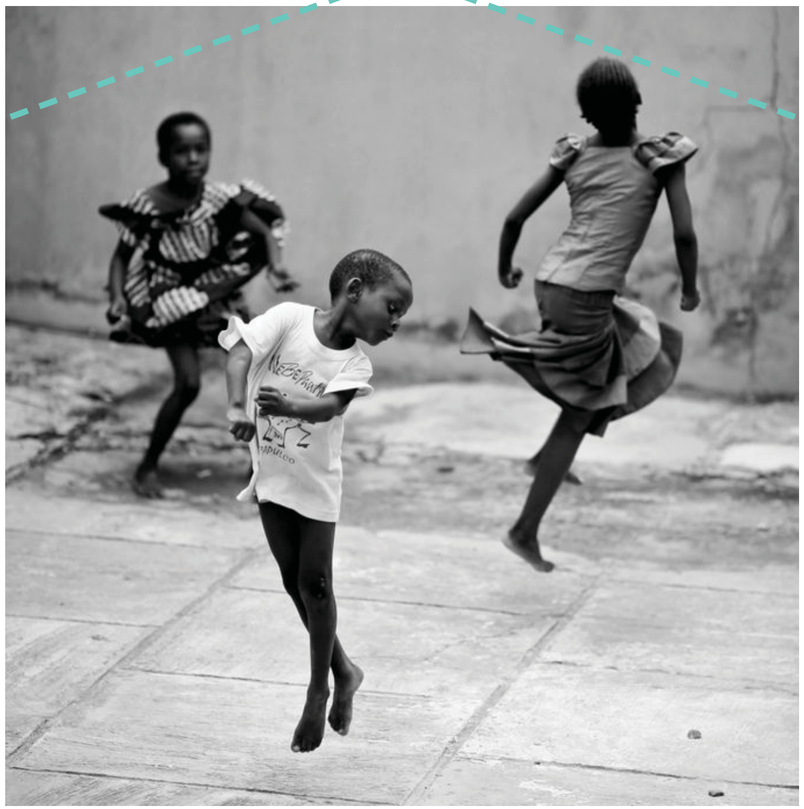


Image by GK Sholanke
(www.flickr.com)

THE DUTY OF ARCHITECTURE IN THE LIVES OF BEREA'S CHILDREN

Because of these very real concerns for the child growing up in Johannesburg and particularly in the Hillbrow area, it is necessary to consider the appropriate architectural response. As mentioned, there is an inadequate provision of crèches and schools, however, designing one more will not make an adequate contribution to the vast backlog and the quality of that facility will have the capacity to reach only a handful of children.

Perhaps, then, an additional or alternative facility can be considered to support (rather than replace) the existing crèches and their teachers? Such a facility could offer a place to which several crèches and nursery schools could visit as well as a facility which houses supportive facilities for teachers and parents. This could host teaching and parenting workshops or act as an 'everyday' place where parents could get support from other parents and/or professionals. On top of this, the provision of a safe and quality play space could relieve parents of the demand to provide for their children in their private capacity. A facility which offers a variety of developmental opportunities to these city children also has the capability of giving them a better foundation for life.

With regards to the architectural quality of such a facility, Hurtwood asks the very relevant question: but "how can we restore some of this lost mystery and keep alive a keen sense of curiosity? All children, unless physically ill, have spontaneous gaiety. When their inherent curiosity and gaiety are crushed or limited by their living conditions, their vital, creative drive may also be crushed." (p11, Hurtwood, 2011) It is therefore the duty of architecture to inject 'curiosities and wonder' into its spaces, particularly within a context where such qualities are crushed. It is also its duty to leave 'breathing room' for the child to grow his imagination and thinking capacities.

Within this, Mark Dudek also includes the importance of sensory experiences. He writes:

> 'The structural space should support the children in their social learning as well as their sensory learning. By adapting the premises to the powers of sensory perception, a sense of spatial awareness should be transmitted... The contemporary kindergarten architect risks taking up the challenge of play. His spatial play should be harmonious with children's play." (p8, 2000)

04.

DESIGN

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AIM:
To combine the issues raised and theories discussed in a tangible design.



the toy library concept

I suspected that there was an issue of playlessness in children's lives as a general cultural problem, exacerbated by environmental deprivations for the lower classes of our society. But what is the spatial and programmatic answer to 'playlessness'? I observed that crèches did not encourage play as such and rather acted as a baby-sitting service. Where then is the space for play for young children?

I found what is called a "Toy Library". It functions as a service additional to the home or school for children to play as well as borrow the toys it houses. Central to the toy library is the philosophy that play is important. It is founded on the belief that play is an integral part of a child's development rather than a separate entity. Lizette Berry from the Child Care Information Centre writes:

> "Toy libraries exist to promote the principle that play does matter to the developing child. They operate as a preventive service, filling gaps in the existing provision for all families with babies and young children and for people with special needs. By offering a befriending, supportive service to parents and by making available and lending appropriate toys, they extend the opportunity for shared play into the home..." (Ashford, 1992)

Toy Libraries exist in a variety of diverse venues: from medical to educational institutions and from rural to urban communities. In fact, they exist wherever the need is found and the initiative taken. Mobile Toy Libraries also exist in order to extend the service to isolated communities in both city and rural areas. The Occupational Therapy department at the University of the Witwatersrand, for example, operated a mobile toy library attached to the back of a bicycle. It was taken through the streets of Berea and Hillbrow to reach the city children. The service allowed children to borrow toys they would otherwise not have access too. Unfortunately this service is no longer running.

Toy Libraries serve the following primary functions:

1) allowing emotionally disturbed, handicapped, and normal children access to a range of toys and equipment currently available on the market and matching equipment to children's needs.
2) seeking to help parents become more critical in their choice of playthings and promoting the understanding that play activities can serve a developmental funtion (emotional or cognitive).
3) offering an informal meeting place within the community where parents can meet and gain support.
4) Making parents aware of the spectrum of services available in the community and, further, facilitating contact between parents and professionals.
5) lending toys to low-income families in which the purchase of suitable toys is impossible.

(pp 275-276, Wilkinson, 1980)

Toy Libraries therefore appear to have a focus more on the parent than on the child at present.

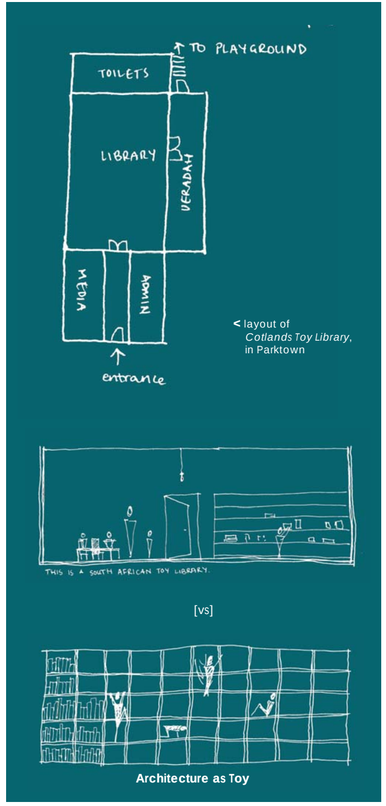
Pryor, however foresees that the Toy Library has the ability to expand in the future. He writes: "Toy Libraries are well-suited to serve an important function in the community. ... We all play, and as such feel comfortable with a service where play is the basic medium of interaction and exchange." (p281, 1980) He therefore implies an additional function to serve the community in a bigger way as well as cater for the needs of the parents and their children.



The intimidating architecture of Children's Memorial Institute in which the Toy Library is located
(author's own)



The interior of the Cotlands Toy Library
(author's own)



a visit to the Cotlands Toy Library

One such facility in Johannesburg is housed on the third floor of the Children's Memorial Institute on the edge of Hillbrow. This is a medical facility specifically catering for children's needs and houses services from occupational therapy to general practitioners to organisations such as Childline. While perhaps an appropriate location for a Toy Library because of the supportive functions in the building, the architecture itself is formidable and intimidating for a children's centre. It's location (being separated from Hillbrow by Joubert Street) means that this institution is separated from the community it serves and one must travel through long, confusing corridors to access the Toy Library.

Children use the Toy Library mainly after school between 2 and 4pm. On the days that I visited, most of the children were either dropped off by their parents or they had walked there by themselves. The younger children were brought by their parents and often played together with them (though often the parent seemed quite disinterested). ECDs (play schools) also use the facilities but they bring their own care-givers to look after their children.

A 'toybrarian' is employed to oversee the children's play and essentially run the Toy Library. The role of the toybrarian is to observe, encourage and rotate the children in their play, however the children are free to choose what they do and the toybrairians do not get too involved. They do, however, check that children are playing with appropriate toys and that they are using them correctly. The toybrarian at Cotlands Toy Library was adamant that this was not a crèche or nursery school explaining that the main difference lies in the crèche's structured schedules and activities compared to the toy library's freedom and flexibility.

According to the toybrarian, the children like to play soccer outside in the playground and tend to play inside only if it is raining. There is, however, a spatial disconnect between the interior play space and the outside environment. The boy's favourite toy is apparently LEGO and the girls particularly enjoy playing in the dress-up section. There is also a very small room for books and children's videos which children may hire.

This Toy Library is successful in that children enjoy playing with the toys. The architecture, however does not speak of the inspiring child's play that it houses.

Spatially the Cotlands Toy Library is not an inspiring playspace. This project aims to take on the challenge not only to house toys but for the architecture to be the toy which enages children in play.

i.

DESIGN INTENTIONS/ BRIEF

In response to the context and the consideration of a Toy Library as a good model for services supplementary to a child's schooling, what are the architectural aims of this project that will propose an adequate design?

As stated above, this project recognises the need for a secure children's facility in the context of lower-class Hillbrow and Berea. It intends to be a resource centre for the nursery schools and families with a primary focus on the child. This resource centre will provide much-needed play-spaces within a broader play-park.

This project has two aims, the first dealing with the overall design for the site and the second, deals with the architecture itself.

A.
TO IMPROVE OPEN, NATURAL PUBLIC SPACE

This involves (a) improving the quality of one of the few open green spaces within the concrete context of Hillbrow and Berea. This will involve making the space more efficient with less wasted space as well as capitalising on those elements that are already being well-used. (b) This aim also involves designing a building which integrates with the park and thus contrasts with its built surrounds in order for the park to remain the sanctuary and place to which people escape and relax. and (c)

B.
TO CREATE AN ARCHITECTURE OF PLAY

The first aim is to create a safe space for children in which they are allowed the complete freedom to grow and learn through their experiences. Because it is a facility that offers services additional to a child's schooling, it therefore aims to fulfil needs that are not currently being met by the schools and crèches that the children are attending. This need appears to be play spaces as well as support structures for the parents and teachers in the area.

In order to accommodate for this successfully, it is necessary, to consider the possibility of architecture as a toy in itself and therefore an architecture that engages play. Having said this, it is also this project's aim to remain subtle rather than over-designing a space which might hinder a child's imagination. Beyond this, the project must consider the additional programme required to support play facilities and possibly involve the broader community in its workings.

ii.

ALEC GORSCHAL PARK: AN ANALYSIS

This chapter looks at at the specific site (Alec Gorschal Park) and its elements in order to properly inform the siting strategy for the toy library building as well as the design itself.

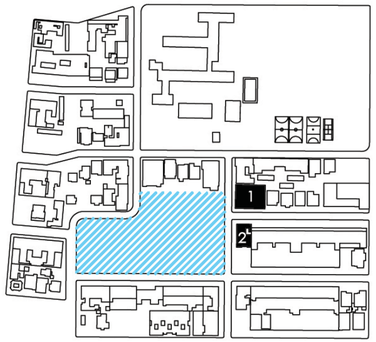




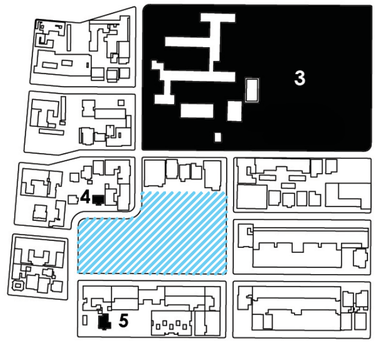
1. DELAROMA APARTMENT BLOCK



2. BEREA CHRISTIAN TABERNACLE



3. BARNATO PARK HIGH SCHOOL

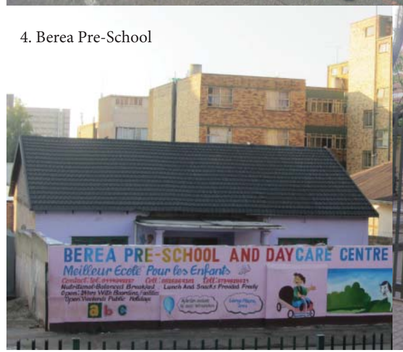


4. BEREA PRE-SCHOOL

5. HILLBROW LIBRARY



3. Barnato Park High School



4. Berea Pre-School



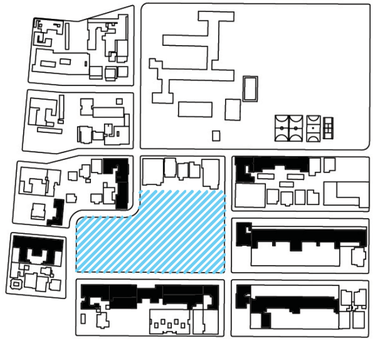
5. Hillbrow Library

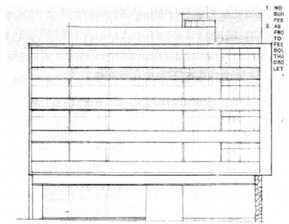




6. HIGH-RISE APARTMENT BLOCKS

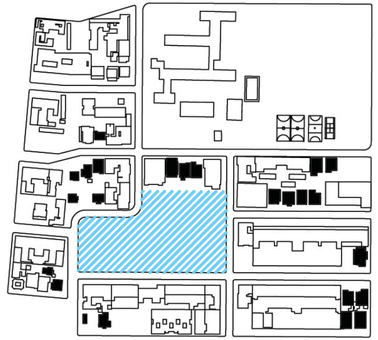
surround Alec Gorschal Park, creating a sense of enclosure. The extremely built-up urban fabric also creates a stark contrast with the open, natural space of the park. People watch the park from their windows which creates good surveillance. These apartment blocks have very little to no open space of their own which make the park a much-needed facility.





7. CORRUGATED IRON HOUSES

At the same time, several of the original corrugated iron houses have remained. Many are in a dilapidated state, including those on the northern boundary of Alec Gorschal Park. Shacks have also been built in several of the properties' gardens for additional accommodation.













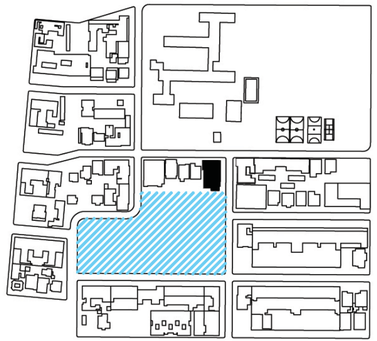


7. 'MISSIONARY CENTRE CHURCH OF GOD'

This church is well-used throughout the week. Its 'home' congregation is a French-speaking African community and therefore its members are predominantly foreign nationals. They use the building for Sunday church services, week-day meetings and other events. The building is also used by other church congregations for church services and events. Although adjacent to the park, it is shut-off because access is only from Fife Ave or Barnato Str.

The building also houses a crèche which operates from Monday to Saturday. It consists only of a dark room with 2 cots in it and no sign of toys, play equipment or learning materials.

It is possible and desirable to create a connection to the church and therefore link it back into the park.

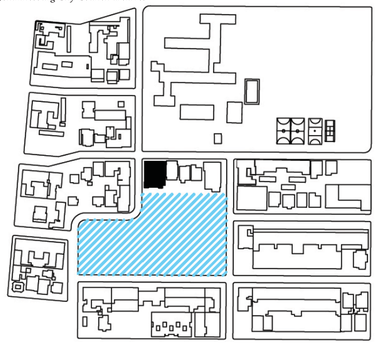


8. 'BEREA GARDENS' APARTMENTS

This five-storey residential block houses large 2-bedroom apartments (four on each floor). The entrance lobby and parking garage are situated on the ground floor while the residential units account for the top four floors and the roof, too, is accessible. At the moment, the building faces only onto Beatrice ln and Barnato str (essentially turning it's back on Alec Gorschal park, however with the introduction of a north-south pathway, running past the building, there is opportunity for the foyer to open onto the park too.



Floor Plans of *Berea Gardens*
Johannesburg City Council archives







PATHWAY THROUGH THE PARK

High-rise apartment blocks surrounding and 'surveying' Alec Gorschal Park with a major pedestrian route running parallel (eat-west) through the park.



HILLBROW TOWER

The park's close proximity to one of Johannesburg's most prominent landmarks.



SOCCER PITCH

Possibly the most well-used facility in the park, this astro-turf soccer pitch draws spectators all-day as teams, casual players and children engage in the game.

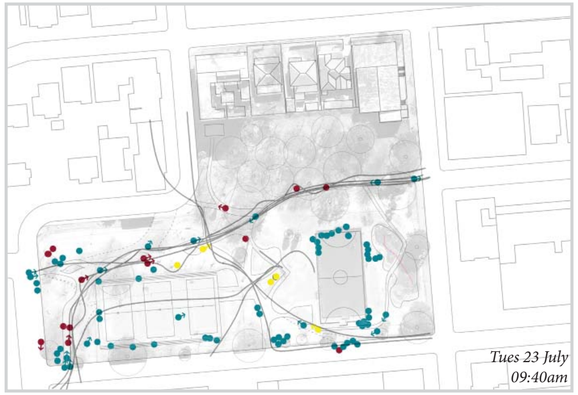
PLAYGROUND

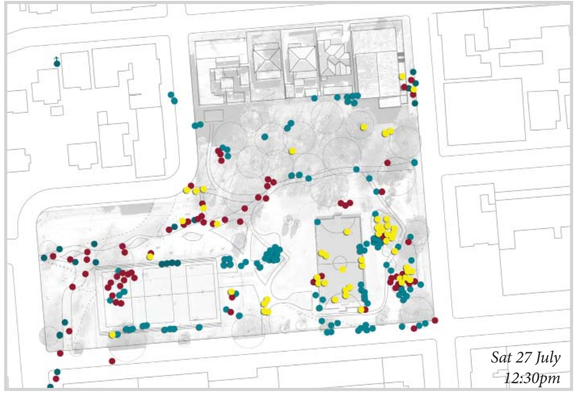
The well-used steel playground to which children come by themselves, with friends or with parents. parents. Used predominantly on weekends and afternoons but sometime parents will bring their children during school hours as a treat.

park's existing uses

Through this mapping, one may observe that the soccer field, playground and path are the busiest areas of the park. The park is also used predominantly by men though children and women make use of it on weekends and can be found along the paths and on the playground. The northern portion of the site (between the path and the buildings on the site) is particularly unused.

KEY:
- Children
- Woman
- Men

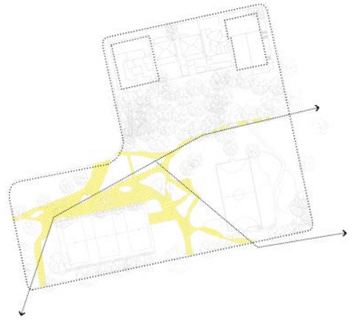






ROUTES & TRADING

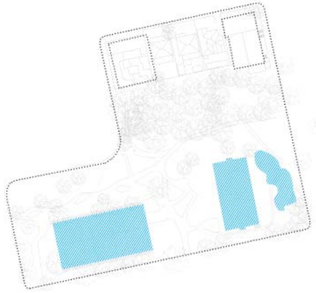
Alec Gorschal park acts as a major thoroughfare between Yeoville and the shops in Hillbrow. Because of this, the east-west route is particularly active. Many traders take advantage of the high pedestrian traffic. During the week one will find snacks and fresh food on sale and on weekends, the addition of second-hand clothing.





SOCCER, NETBALL & PLAYGROUND

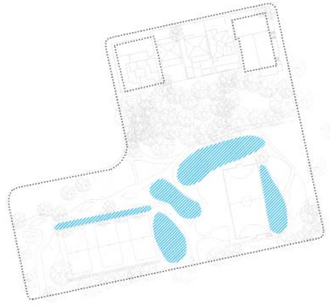
These are the three major activities accomodated for in the park; all a form of play. The soccer field is particularly well-used and the main attraction of the park for entertainment. The playground is also well-used and often over-crowded. Parents say that they would prefer it if it were more separate from the park and therefore safer for their children. The netball courts are not as actively busy though teams use the courts in evenings and won weekends.





GAMBLING, CHESS & CARDS

Gambling, chess and cards games are commonly observed throughout the park. The men in particular like to play these games as a form of entertainment and can be seen in large groups on weekdays or weekends.





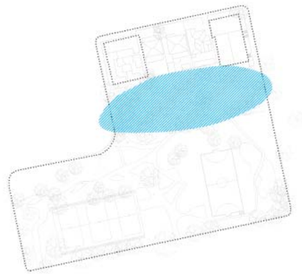


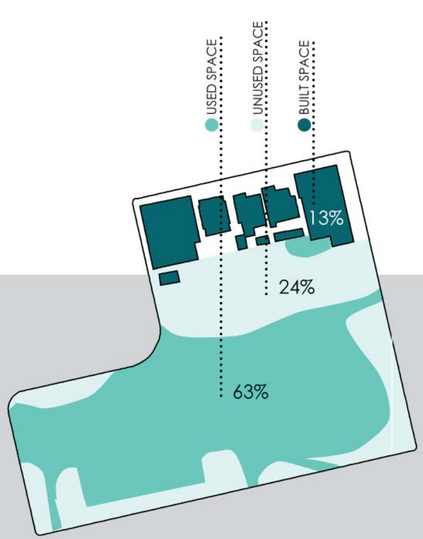
SELECTED LOCATION FOR BUILDING

Because Alec Gorschal Park is already a well-used facility, the siting strategy for my proposed building needs to take into consideration these existing uses as well as acknowledge the 'dead' zones of the park. One such 'dead zone' is situated along the northern boundary of the park. It is disconnected from the rest of the park because of its lowered ground level. It is also densely populated by trees, making it a darkened, shadowy place; uninviting to the park's users.

It is here that I propose my building.

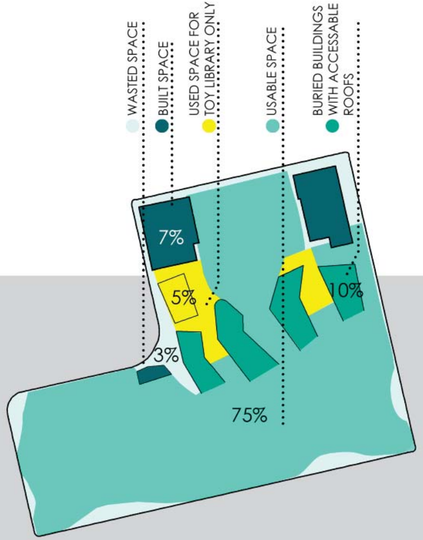
Because of the city's dire need for open public space, it is necessary to leave successfully used open space for the public and rather activate those spaces that are not being used to their full capacity.





USAGE OF EXISTING SITE

The existing park structure leaves a lot of wasted space that people do not use. The built structures on the site also account for a lot of space that is not accessible to park users.

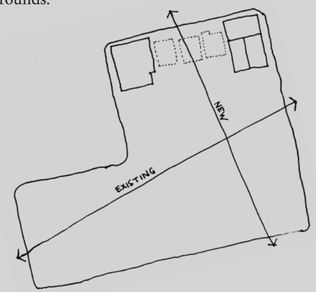


USAGE OF PROPOSED DESIGN

This project proposes reducing the built mass and where built fabric is required, designing it in such a way that the roofs are still accessible. This is important for an area where open, natural space is scarce. Some space is required for the sole use of the toy library users, however this is not wasted space.

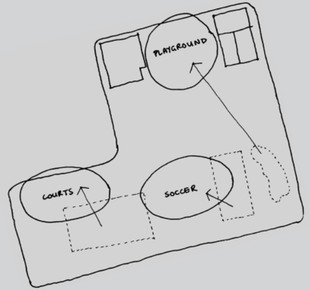
ROUTES

The park as a thoroughfare is an important aspect to retain. The routes through the park therefore remain an important element in the design. Additional to the major east-west route, an additional north-south route has been created in order to integrate the park more with its surrounds.



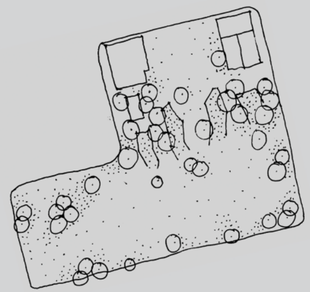
RESTRUCTURING THE EXISTING

This design remains concious of the fact that Alec Gorschal park is successful in terms of providing useful facilities for its users and therefore aims to restructure those uses rather than reprogramme the park completely.



RETAINING THE 'PARKNESS' OF THE SITE

Designing a subtle, integrated building that does not disturb the park but rather compliments it and blends with it.



iv.

playing with architecture: a process of making

What does play mean for architecture?

This chapter discusses the role of play in architecture as well as the role of play within my own design process. It is also acts as a culmination of the theoretical underpinnings and site selection.

In a similar way to Carroll's *Wonderland,* architecture begins as a world of 'curiosities and wonders'; as the imaginings of the architect or the recipient/ client. It is a beginning of dreams, hopes and ambitions.

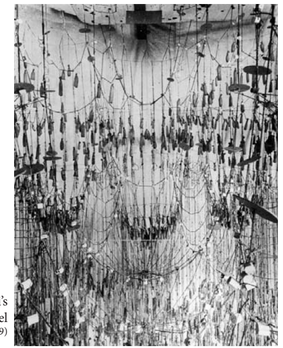
It is architecture that provides the architect with a platform to 'play' with built form. In fact it is through architecture that an architect may play with and sculpt his world. I use the term "play" because just as a child experiments with his world and re-enacts scenes through his play as preparation for the real world, so too do architects experiment with form through models and drawings before they come to life as a constructed building. I also use the term "play" to describe the process of creating architecture. It is a process of trying things out, experimenting with different configurations, balancing a project's requirements and restrictions and at the same time attempting to create something unique. To 'play with an idea' is a phrase epitomised by the design problem.

The truth about architecture is that it is not building just as a child's doll is not a real baby. In reference to McHale's (1987) definition of an "other world" having an ontological difference to the real world, architecture can quite clearly be seen as different through both its medium (of drawing and model) and its inherent property of being visionary (rather than actual as a building is). The difference essentially lies in architecture as an abstraction of building just as the 'other world' of child's play and narrative is an abstraction of reality.

Architecture's toy is the model. It is an abstraction of the architecture itself because of its scale and because of its different materials. Spanish architect Antonio Gaudi is well-known for playing and experimenting with structure through his suspended model structures. It was a way to test the structure in a safe environment before building it in reality; similar to the way children experiment and test situations through the safe medium of play. There is also something quite playful in the fact that Gaudi's structures are upside-down representations of his buildings. In this sense the model is a distortion of its built counterpart and thus can be seen as something different: as a world apart. The distortion itself indicates that it is not real.

Alvar Aalto also experiments with architecture though in a different way. In his building 'Experimental House', he experiments with facade cladding at a 1:1 scale; essentially turning building into his model and thus building into his toy. According to Pallasmaa (p.77, 2009) "Aalto points out the importance of experimentation and play in his design method."

> Aalto says: "[I have] a firm conviction and instinctive feeling that in the midst of our labouring, calculating, utilitarian age, we must continue to believe in the crucial significance of play when building a society for human beings, those grown-up children." (ibid)



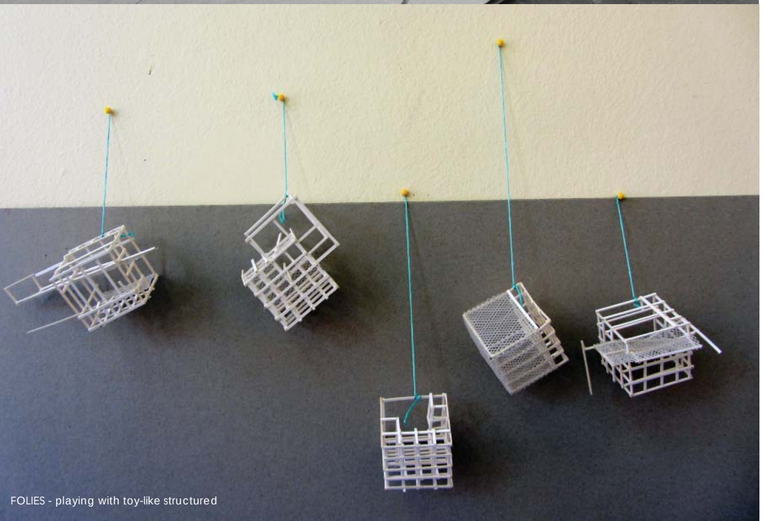
Antoni Gaudi's suspended model
(p78, Pallasmaa, 2009)



Experimental House by Alvar Aalto's
(www.designboom.com)



a process of playing in model-form



FOLIES - playing with toy-like structured

If the model is architecture's toy, then the 'folly' is the toy of built form. Anthony Vidler defines the folly as follows: "What was not permitted in 'serious' building was, by definition, permitted in the folly. A mere plaything, the folly could exhibit the dimensions of play." (p.11, Archer, 1983) And yet the architectural folly exists precisely because of its opposite. According to Vidler (ibid), the folly, as a figure of unreason, received its precise definition during the Enlightenment, during the age of reason. The folly is therefore the 'architecture of the other world' where things that are not permitted in reasonable, civil society are permitted precisely as a means of maintaining order.

Because a folly is essentially given its meaning through the context in which it finds itself, the folly in the modern city will be different from that of a country farm. Paul Rudolph writes: "..follies have a special meaning in urban situations: for nature which has been supplanted with a man-made environment usually leaves man thirsty for nature. The folly in the city is, therefore, the most important for it brings together man and God. The folly is for the subconscious. In the city the folly depends on natural elements – rivers, mountains, lakes – juxtaposed to the man-made." (p.86, Archer, 1983) In this light, the city park is given new meaning: as the site of folly, as a place where its natural form creates a world apart from its built surrounds as well as a place of freedom where people may play in a way that polite society or the restrictions of communal living do not allow.

This is therefore a leading factor for Alec Gorschal park within the context of Berea. The natural aspect of the site in contrast to the built-up surrounds immediately makes it an 'other' place: a place perhaps to escape the pressures of daily life, a place to enjoy some open space and fresh air, but also a place where play and playfulness are not only allowed but are actively encouraged.

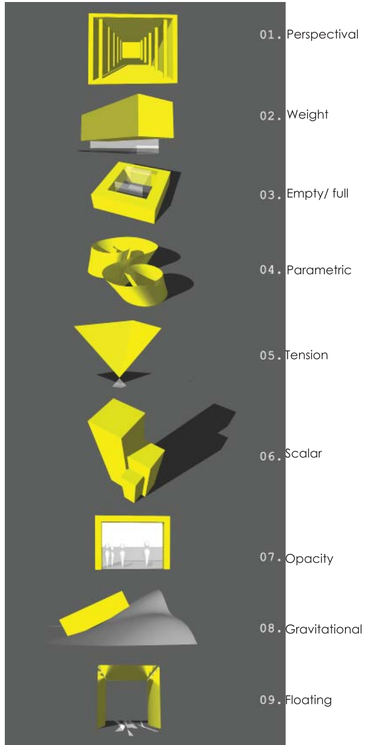
My design process, like that of the architects and artists I have mentioned in previous chapters, has been a form of play. It began perhaps at my years in nursery school where my teacher encouraged, in all her young pupils, a sense of playfulness and imaginative thinking. As Juhani Pallasmaa says, it is our personal existential knowledge and past experiences that manifest in an architect's design. (p119, Pallasmaa, 2009) It would seem that for all creatives, existential knowledge is an irreplaceable condition for their work.

With my design process being lead by the mystery and intrigue infused in me as a child, the project was inevitably driven by theory: by the concept of the 'other world'.

From the start, model-building and sketching have been central to the process. There is something in the tactility of holding a knife or a pen and creating with ones own hand that involves one in the design, or as Pallasmaa calls it: "the absent minded hand and its seemingly unconscious and aimless play in sketching." (p73, 2009) I initially played in model form with different building types positioned all over the site: exploring the site, if you will, in order to understand what each configuration would mean. Having then settled on a location for the building within the park, I further explored the idea of otherness through distortions of form. Driven by the absurdity of Alice's spatial experiences in *Wonderland,* I played, tried and manipulated. Part of the process also involved actively joining children in play; allowing them to take the lead and thus learning what it is to play as a child. The rest of the process evolved naturally and instinctively through experiments, changes and finally, resolution.

This quote from Alvar Aalto perfectly sums up the design process:

> "'This is what I do – sometimes quite instinctively. I forget the whole maze of problems for a while, as soon as the feel of the assignment and the innumerable demands it involves have sunk into my subconscious. I then move on to a method of working that is very much like abstract art. I simply draw by instinct, not architectural syntheses, but what are sometimes quite childlike compositions, and in this way, on an abstract basis, the main idea gradually takes shape, a kind of universal substance that helps me to bring the numerous contradictory components into harmony.' Aalto's design approach points out that in creative work a focused consciousness needs to be momentarily relaxed and replaced by an embodied and unconscious mode of mental scanning. The eye and the external world are dimmed for an instant, as consciousness and vision are internalised and embodied." (pp.73-74, Pallasmaa, 2009)



Spatial Distortions/ Illusions
Playing with form

v.

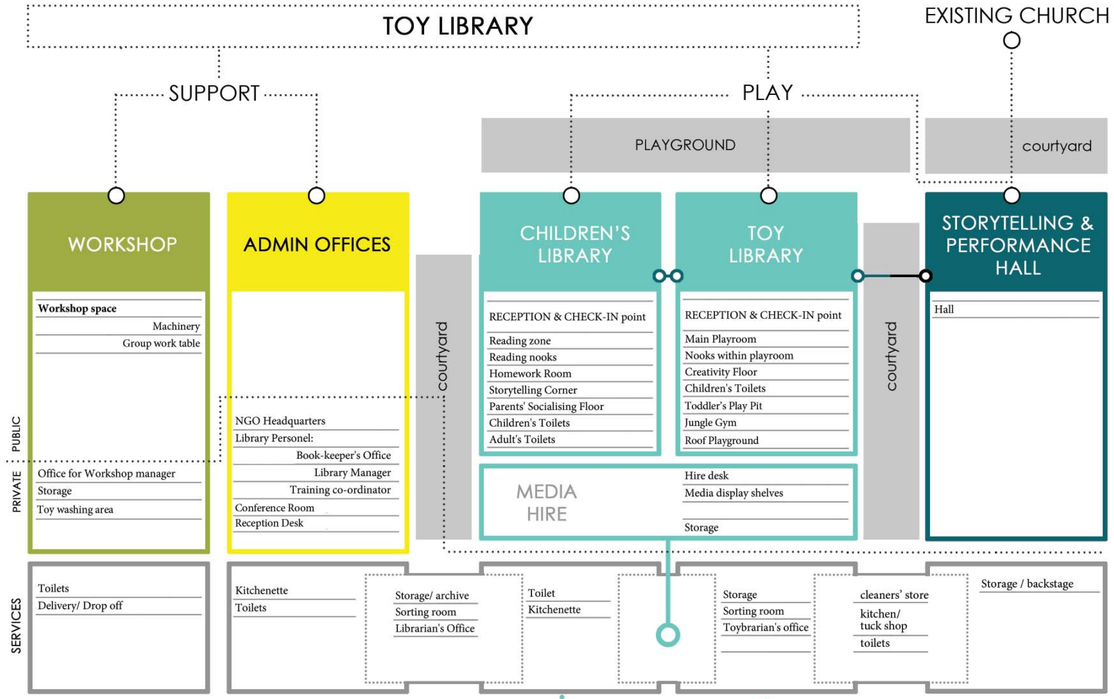
creating a world: programme

Developing a programme of play for the children of Berea.

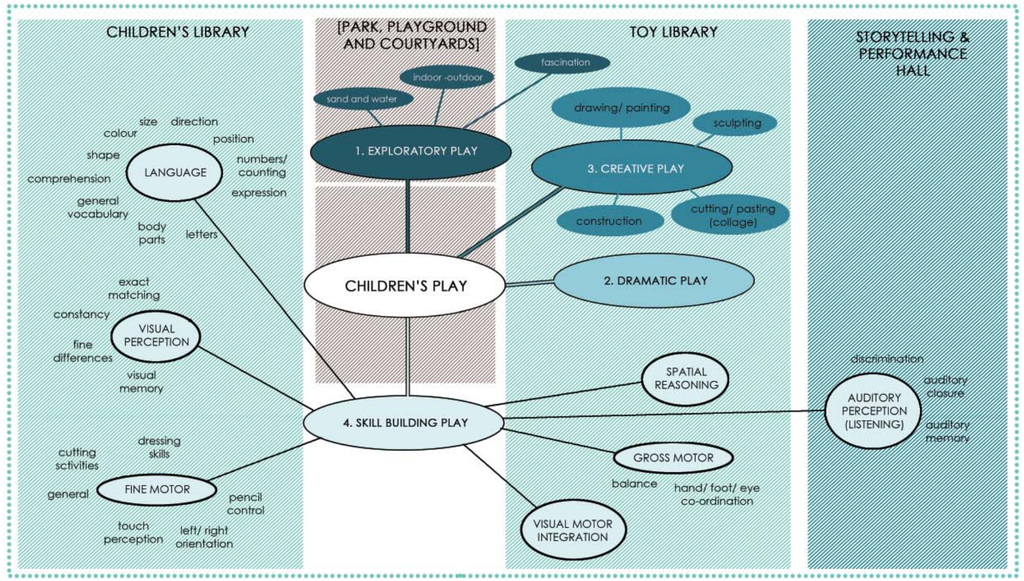
Central to the programme is the concept of the Toy Library, however the needs of the social context of this project necessitate a broader programme that supports the children and families that would be using these facilities. This section looks at the organisation and development of such a programme.

Area Schedule for Toy Library

Sector		Area m²	Total Area m²
Toy Workshop	Workshop space	100	
	Office for Workshop manager	6	
	Wood Store	30	
	Storage	8	
	Toilets	5	**149**
	Delivery/ Drop off	50	
OFFICES	NPO Offices	100	
	Library Personel		
	Book-keeper's Office	5	
	Library Manager	8	
	Training co-ordinator	5	
	Kitchenette & common room	10	
	Toilets	10	**138**
Toy Library	Reception	50	
	Toy display room	150	
	Creative zone	50	
	Wet & wash up area	10	
	Verandah	20	
	Storage	5	
	Sorting room	20	
	Toybrarian's office	10	
	Kitchenette	5	
	Toilet	5	325
Service Link	Toilets		
	Baby Changing room		
Video Hire	Display room	100	
	Storage	5	105
Book Library	Reception	30	
	Display room	150	
	Archive	10	
	Homework Room	10	
	Parent's Floor	20	
	Reading Spaces (x6 @ 3m²)	18	238
Service Link	Cleaners Store	5	
	Cleaner's toilets	5	
	Security Office	15	**25**
HALL	Hall	180	
	Toilets	10	
	Kitchen	10	
	Backstage	20	**220**
Outdoors	Bus drop off		
	Internal Courtyard Playgrounds	600	
	External Playground	600	**1200**



In order to design fully for play, one needs to consider the full range of play activities and so an extended programme is required. This extended programme must include a variety of spaces for play as well as provision for the required facilities that are needed to suport play.



PROGRAMME ORGANISATION OF PLAY REQUIREMENTS (BASED ON THE 'TYPES OF PLAY')

manufacturing toys

The toy industry in South Africa is very small at present which means that the majority of its toys are imported. There is, therefore, an opportunity, create a workshop space in which community members and hired craftsmen can make use of waste materials and new materials to create toys for the toy library, for crèches and for homes.

The toy industry may, however, be changing. The first ever *African Toy and Game Fair* will be hosted in Cape Town in May 2014 (africantoyassociation.org). In addition, small community-based industries such as 'Shwe Shwe Poppis' have been started to support their communities. This particular group make fantastical dolls ('poppis') using indigenous fabrics (shwe shwe). These dolls are based on drawings by children from one of the community nursery schools and therefore also makes an interesting link to child art.



Furniture and toys hand-made by community parents for the Cotlands Toy Library in Hillbrow.





Shwe Shwe Poppis *and a corresponding child's drawing*

Making and repairing toys

One of the major support facilities required for the Toy Library is a place where toys can be mended and maintained. According to Sarie Mommsen who runs her own Toy Library in Bredasdorp, South Africa, it is common for old men from the community to voluntarily fix broken toys. For this reason, it is necessary for a support space of this importance to exist in its own right. The Toy Workshop therefore exists for the mending of toys as well as a facility to host toy-making workshops for teachers and parents in Berea. From an economic standpoint, it will also be beneficial to allow craftsmen to make toys for the library and to sell.

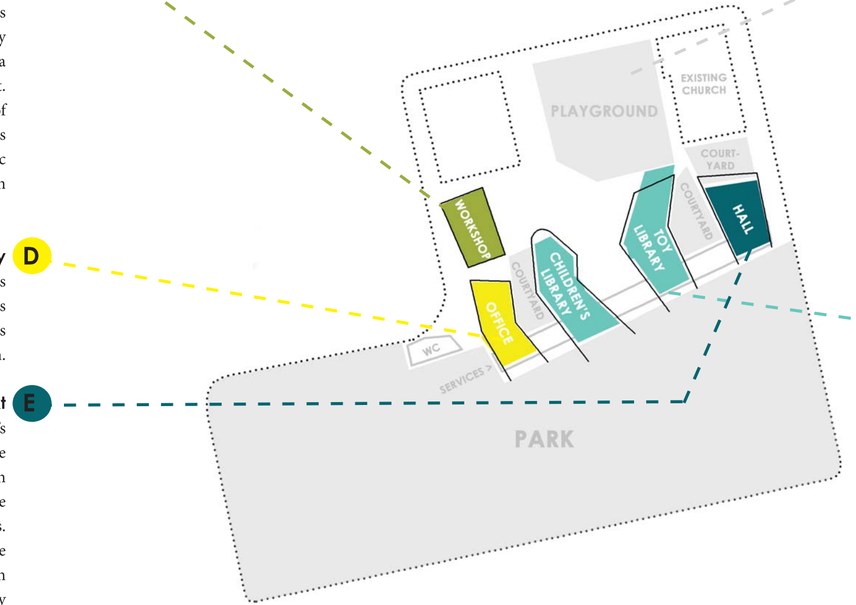
Supporting the Toy Library

All the Toy Libraries in South Africa are run by NPOs (non-profit organisations). The two levels of offices therefore provide space from which an NPO may run as well as house the necessary admin staff of the institution.

Connecting with the context

The Storyelling and Performance Hall is the institution's main connection with the community. On the one hand, the hall connects directly to the existing church through a new courtyard. This connection allows the church to use the hall for functions and group meetings. For the Toy Library, it functions as a performance space where children from schools may gather to watch invited performances, hear stories told and potentially perform themselves. The third funtion of this space is as an outreach to parents and teachers. Here, educational and parenting workshops may be hosted to support the community care-givers.

programme massing



A Providing for Play outside

Having established that the outside environment and its natural phenomena are important for children, an inside-outside relationship has been created. This is programmed in the form of courtyards: a hard courtyard between the Toy Library and Hall for 'noisy' play and a courtyard garden serving the Children's Library for 'quiet play'. These spaces are directly connected to the main play spaces of the two buildings; encouraging and allowing children to play outdoors. In addition, the existing playground in the park has been relocated to connect to the Toy Library so that a safer play environment for Berea's children is overlooked by the buildings. It also remains separate from the Toy Library and open to the public so that after-hours, families and schools may still benefit from the outdoor play facility.

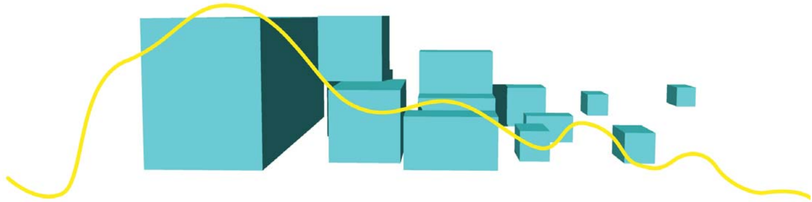
B Providing for Play inside

The Toy Library and Children's Library provide the main spaces of play for this institute. The diagram on the previous page illustrates the programmatic organisation of play in the two spaces. Essentially the Children's Library houses 'quiet play' and the Toy Library houses the 'noisy' forms of play. Although visually separated, these two spaces are connected by a crawl-through tunnel and the Video Hire room, allowing children to move safely between the two buildings and thus also the different types of play.

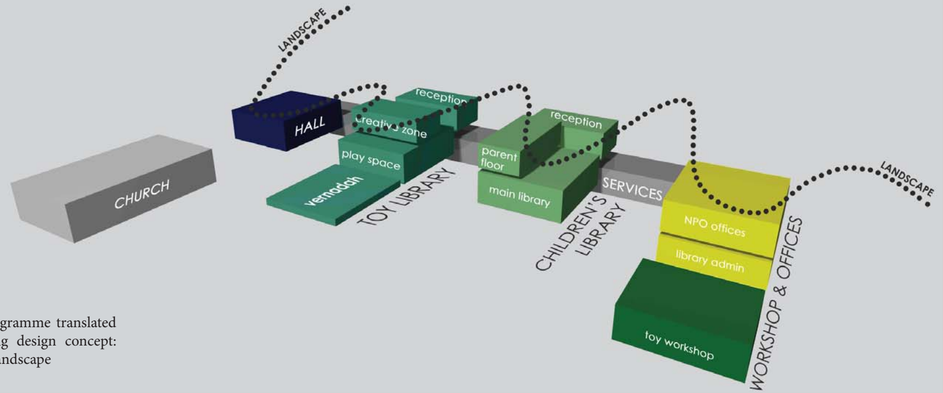
vi.

design concepts

The over-riding concept for this project is the idea of the “playscape”; of ‘toys’ connect by landscape. This chapter explores the two concepts that are derived from this: namely a) integrating with the park and b) an architecture of play.

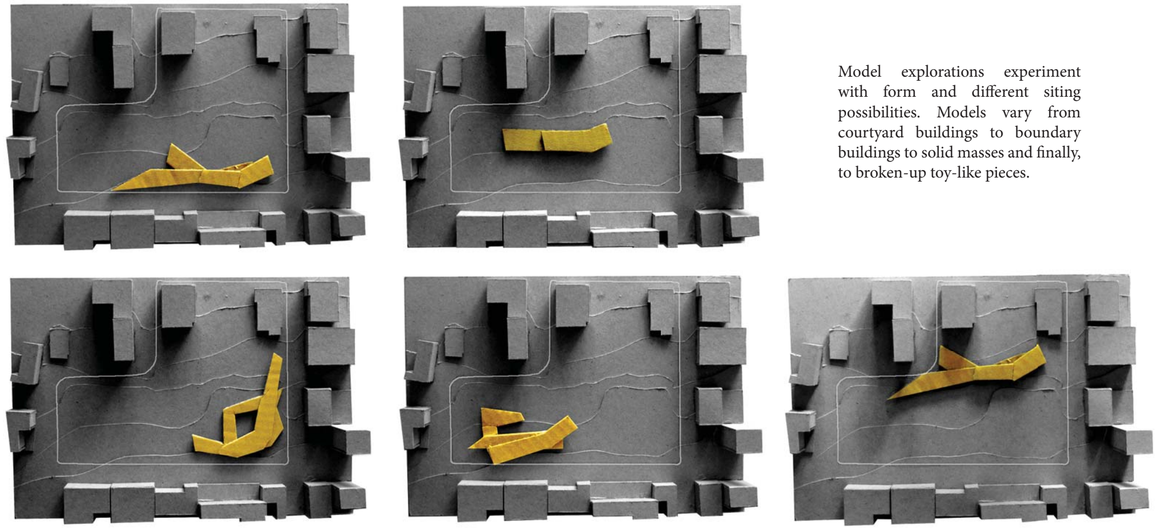


TOYS CONNECTED BY LANDSCAPE



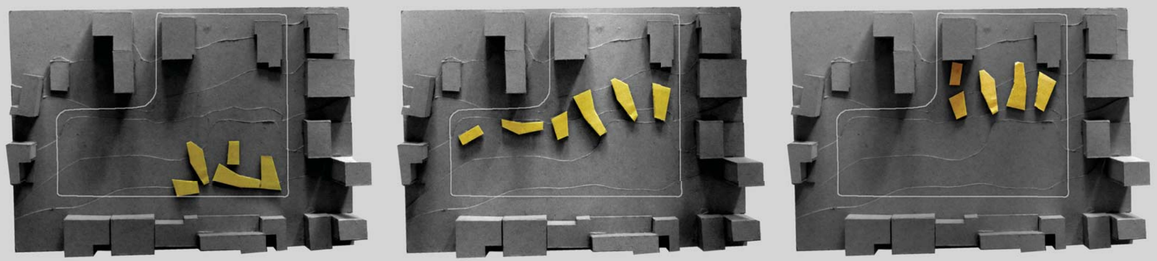
The stacking of pragramme translated into the over-riding design concept: toys connected by landscape

BUILDING MASS



Model explorations experiment with form and different siting possibilities. Models vary from courtyard buildings to boundary buildings to solid masses and finally, to broken-up toy-like pieces.

FRAGMENTED TOY-LIKE BUILDINGS

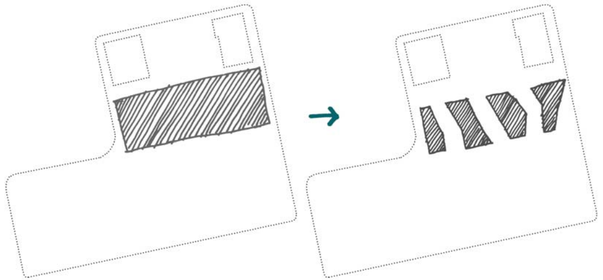


boundary buildings relating to the street/ edge

buildings sitting in the middle of the park

buildings framing a protected courtyard between existing buildings

A. integrating with the park



MASS

A building mass, an institution, an intruder. This is the current typology for a children's institute. It is the footprint too, for the buildings of the surrounding city.

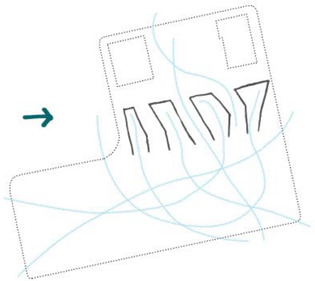
FRAGMENT

If you fragment that mass into smaller elements, like toys, the scale is no longer as daunting and the space between starts to link it into the existing park. This results in a series of individual buildings, with individual functions.

park

building





INTEGRATE

Once broken down, it is possible to integrate the buildings further into the landscape. Bury them, plant on them, then walk on them. This is, afterall, a park - why not lift the ground up and continue the park on the buildings?

WHAT MATERIALISES IS A BUILDING LIKE
FINGERS EMERGING FROM THE LANDSCAPE

Alice's Spatial Narrative

ALICE SITS ON A RIVER BANK WITH HER SISTER. SHE IS BORED UNTIL SUDDENLY A WHITE RABBIT RUNS PAST

SHE FOLLOWS THE RABBIT THROUGH A TUNNEL UNTIL ...

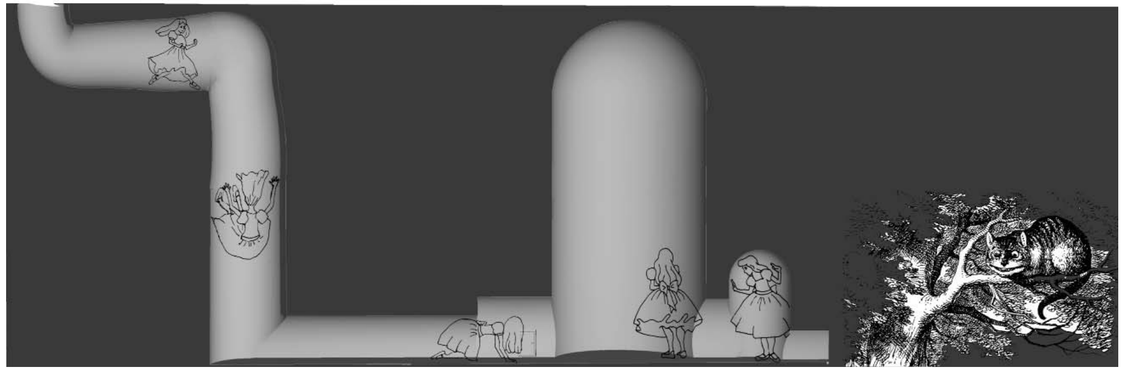
ALICE FALLS DOWN THE RABBIT HOLE. FALLING ... FALLING

AFTER WALKING THROUGH A LONG TUNEL, ALICE COMES ACROSS A TINY DOOR. A DOOR INTO WHAT WORLD?

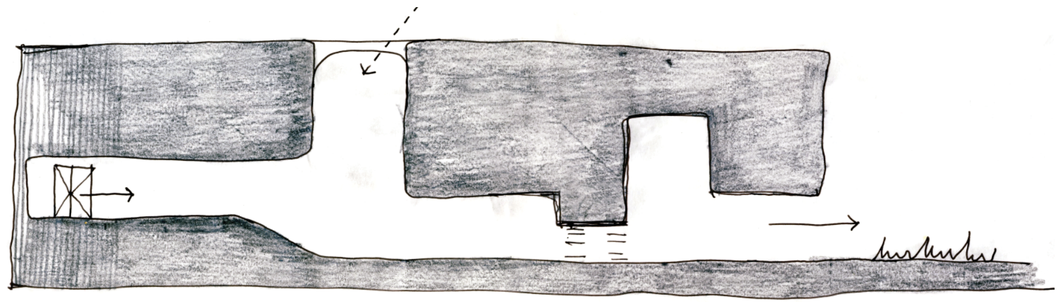
ALICE SHRINKS AND DISCOVERS A VERY LARGE HALL

AND THEN GROWS SO TALL HER HEAD CAN TOUCH THE CEILING AND SHE CAN BEARLY SEE HER FEET

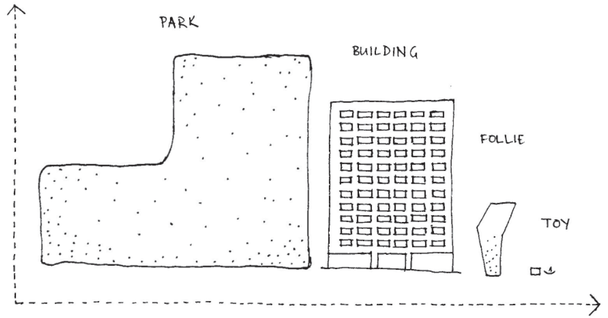
FINALLY, ALICE ENTERS THE GARDENS OF WONDERLAND

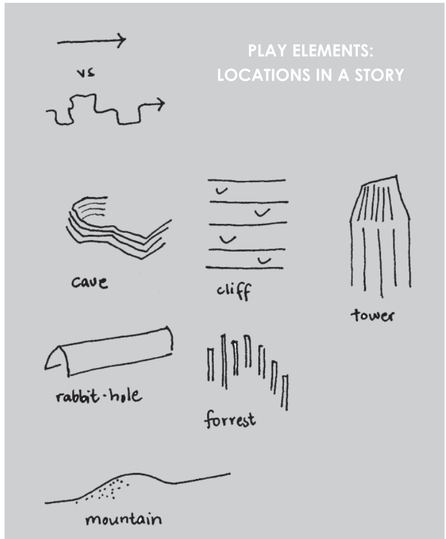


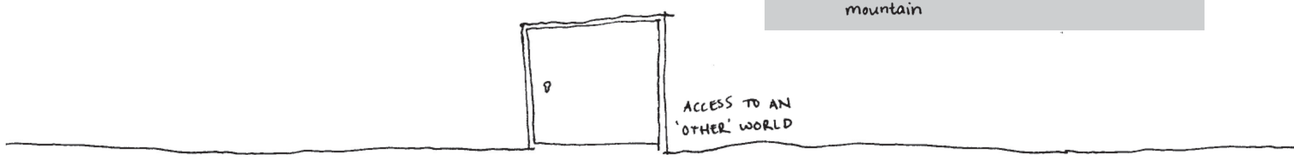
Building as Experience



B. an architecture of play



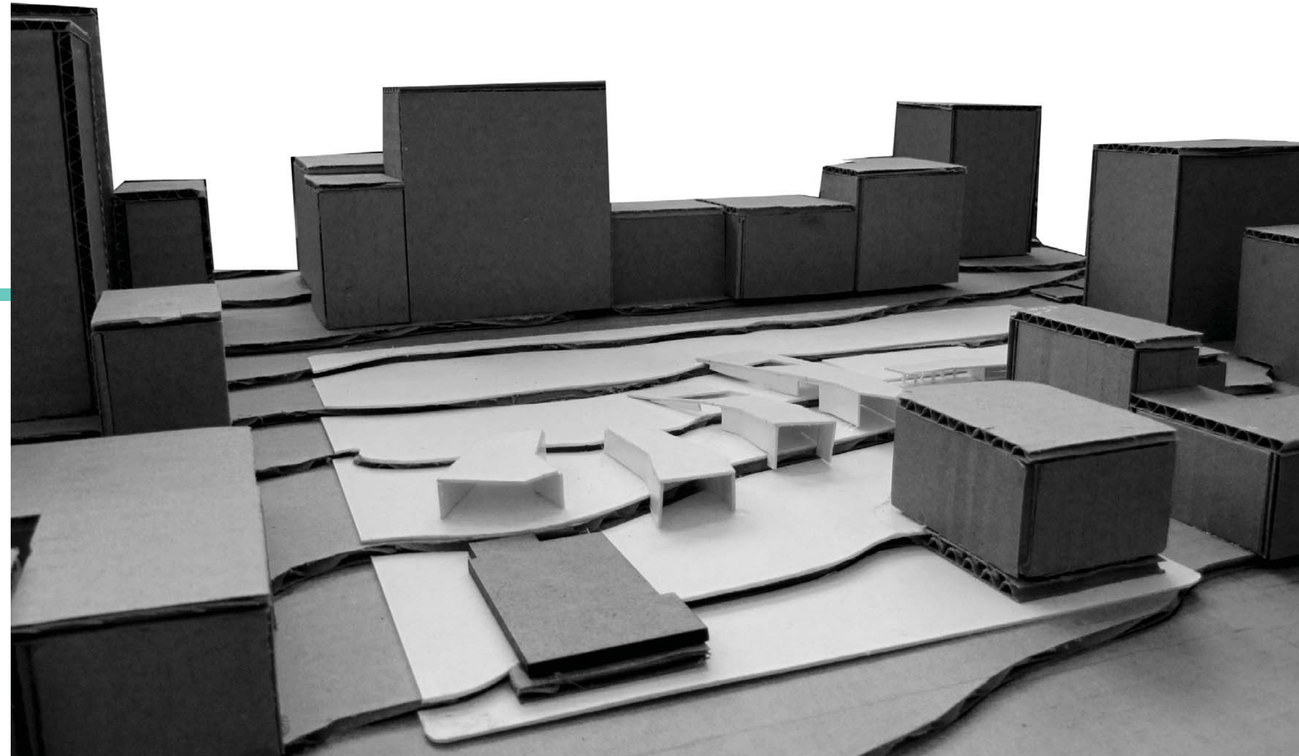




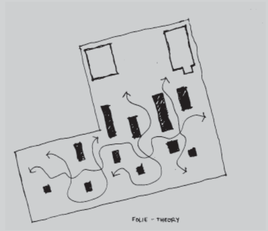
vii.

design development

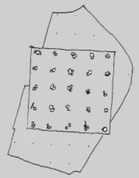
This chapter extends the two concepts into practical implementations for the design. It discusses the decisions that were made and the conclusions that were drawn.

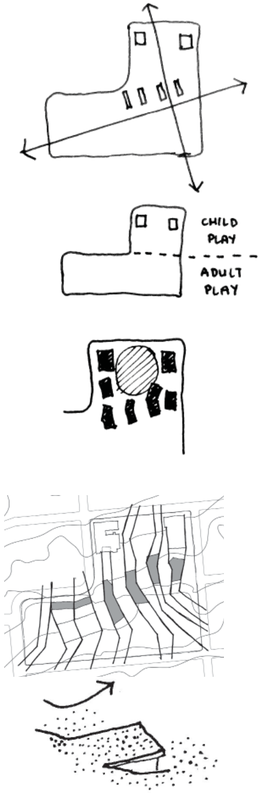


Design inspiration from Bernard Tshumi's Parc de la Villette. *The idea of breaking up a building and scattering it across the site allowing for flow and freedom in the in-between.*









01. ADDRESSING THE PATH

Because the park acts as a thoroughfare between Hillbrow and Yeoville, the path becomes an important design driver. The first decision with was in simplifying the path as well as creating a formalised north-south axis. In addition, the buildings are located along the path like a string of beads.

02. PLAY FOR ADULTS, PLAY FOR CHILDREN

With 'play' being central to this project. How does it manifest in Alec Gorschal Park? Because this park is inherently a space of play, it was programmed for 'adult play' and 'child's play' though it is recognised that the two will overlap.

03. A PROTECTED PLAYGROUND

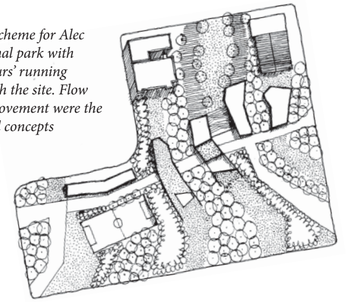
Many user's complained that the existing playground was not safe and nursery school teachers said that a separate playground would be ideal. A contained, protected though public playground has been created: surrounded by the buildings for wind protection and surveillance.

04. ADDRESSING THE CONTOURS

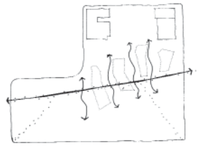
Because Alec Gorschal Park sits on a slope, the topography became a design driver as a way of mimicking and extending the concept of landscape into the project. Firstly, it determined the building's form in that they are 'built contours' going against the grain.

05. PARK LIFTED

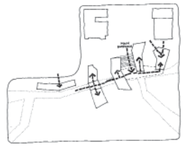
Secondly (in relation to the topography) it became possible to lift the landscape over the buildings and thus continue the park onto the built fabric allowing for a connection between park & building and also optimising usable park space.



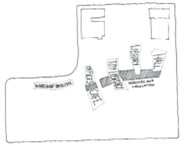
early scheme for Alec Gorschal park with 'contours' running through the site. Flow and movement were the central concepts



flow between the buildings

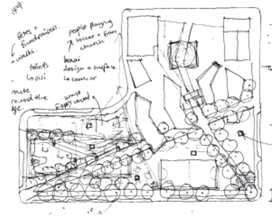


circulation with entrance from the north only

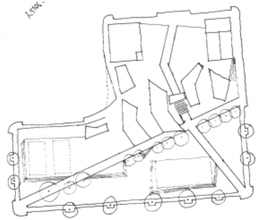


early programming

A. developing the site



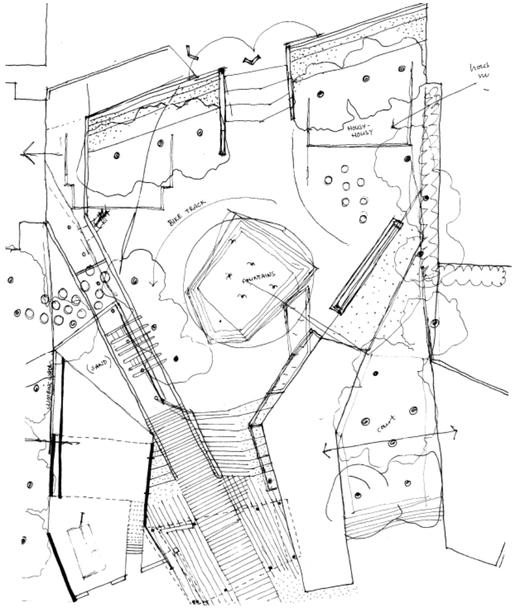
later developments showing clear pathways and activity zones



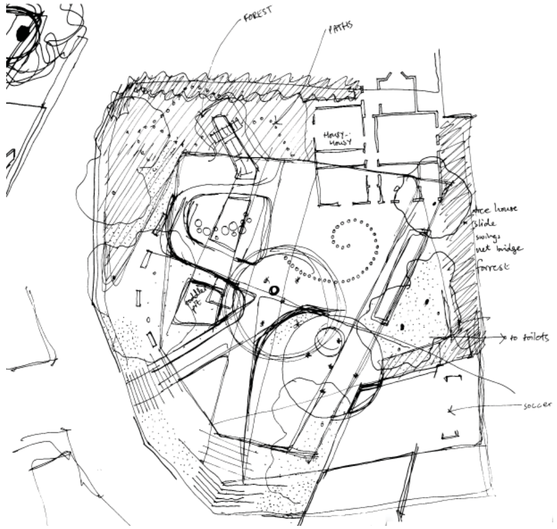
The initial idea for this project was encapsulated in the idea of follies or 'fingers' strung along the major movement route through the park. This facility would provide mainly a toy library and children's library. From the start, there was an emphasis on integrating with the park. For this reason, a building broken up into follies seemed to work as it allowed the park to flow between and through the buildings. The intention was initially, therefore, that users of the park could walk between and onto these buildings almost as if they were not there.

The problem of security, however arose as a real issue for a children's institute. Parents and teachers in the area expressed their concerns over the safety of the existing playground and said that the park needs to have a separate, secure place for children. The possibility of a courtyard for children between the apartment building and church presented itself with the additional advantage of breaking the north wall boundary and creating a new, formalised north-south pathway. The buildings then became the mediator between the park and the playground: creating a boundary, but also a visual connection.

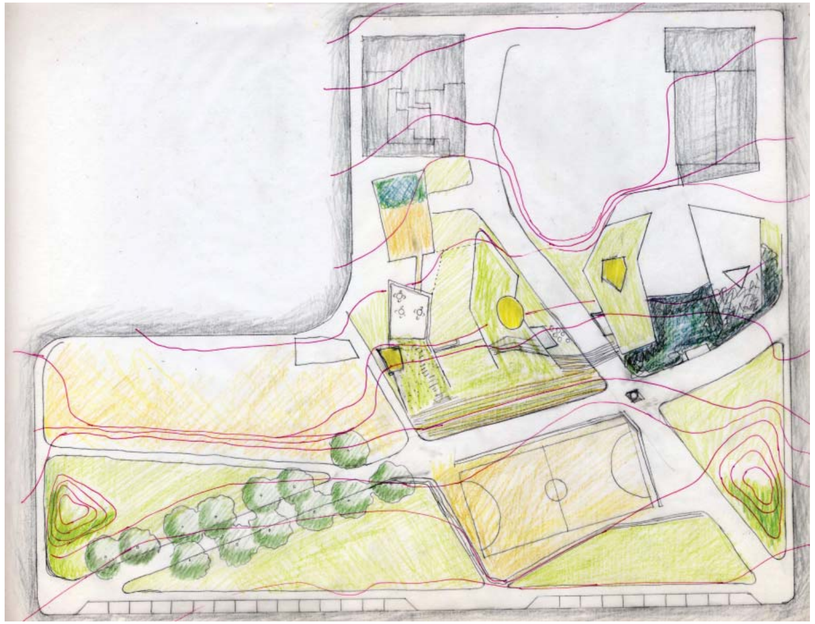
Throughout this process, formal explorations took place, beginning with the idea of fragments scattered across the site like toy-sized buildings and then structured by angular 'contours' snaking through the park. An early concept for the park took this idea further by creating 'play zones' and splitting the programme into the different 'contours'. This idea, however was problematic in that it broke the flow between the functional zones and did not allow for large enough activity areas. A simplified design focussing on the two movement routes through the park, however, was settled upon with each of the segments between the pathways becoming the activity zones.



a complex design exploration of the playground

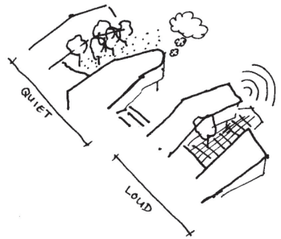


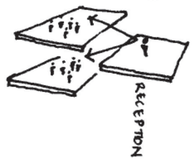
a simplified design with the north-south pathway now running past its boundary

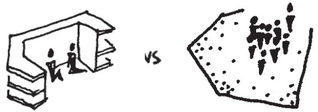


a coloured sketch of the finalised park design











06. FOLIES CONNECTED BY SERVICE CORE

In breaking up the mass into smaller buildings, 'folies' emerged as toy-sized buildings. In order to connect them, a service core was created which houses all the bathrooms, kitchens and store-rooms. Some of these are accessible to the public and others are closed. This frees up the folies for the main activities of work or play.

07. QUIET & LOUD

Not all activities are alike and so the programme was organised into 'quiet' and 'loud' activity groupings. Materials have therefore been chosen according to this purpose: greenery and soft materials for the quiet zones to muffle the sounds and harder surfaces for the loud areas.

08. VISUAL LINKS

For surveillance and therefore protection of children within the two play spaces (Children's Library and Toy Library), a split level section allows the receptionist to view the children on both floors. It also creates a visual link for the children themselves, to play perhaps by themselves but remain visually connected to others if they choose.

09. INDIVIDUAL VS THE GROUP

In catering for a variety of personalities the design must accommodate those who wish to play in groups and those who wish to play individually. To this end, a variety of spaces: large, small, up, down, closed, open need to be designed to allow a child as much freedom of choice as possible.

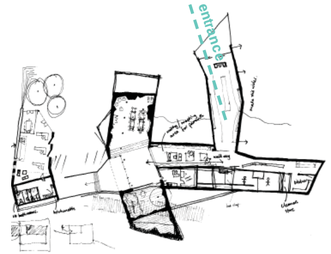
10. CHILD-SIZED

Through a child's eye, the world looks quite different and for the most part, quite large. In keeping with Montessori's theories on the scale of a child's environment, this facility proposes 'child-sized' spaces and furniture, taking into consideration all elements from seat to basin heights so that a child is allowed to be independent in this space.

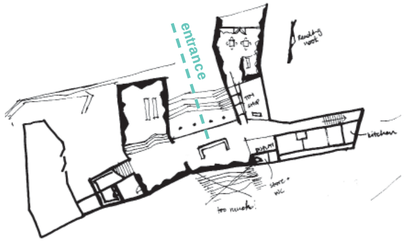
B. developing the building

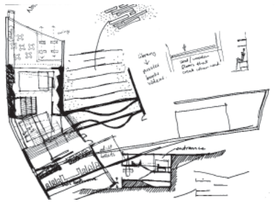


Early sketch of 'experience'



First design plan with entrance in one of the 'fingers'.





Second design plan with entrance in service corridor on basement level. 'Cave-like' interiors for the children's library and toy library house the toys and books in thickened walls.

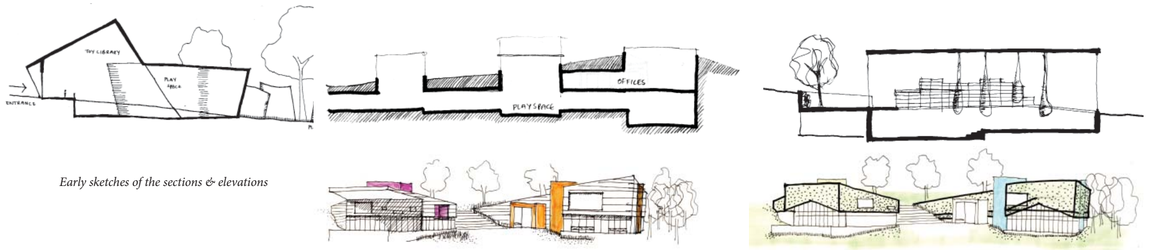
The development of the buildings naturally happened alongside that of the site and in the early stages many decisions were site related. The decision to 'slide' the buildings under the park, for example was in keeping with the idea of integration with the natural landscape.

Because the buildings were separated, it was necessary to create a connection underground so that children could safely move from one space to another without having to leave the building. For this reason, a service corridor connected the fingers underground. Initially, the building could only be entered from the northern courtyard straight into this service corridor. This was problematic, however, because the circulation became unnecessarily complicated and the entrance from the northern courtyard meant that the building essentially turned its back on the park.

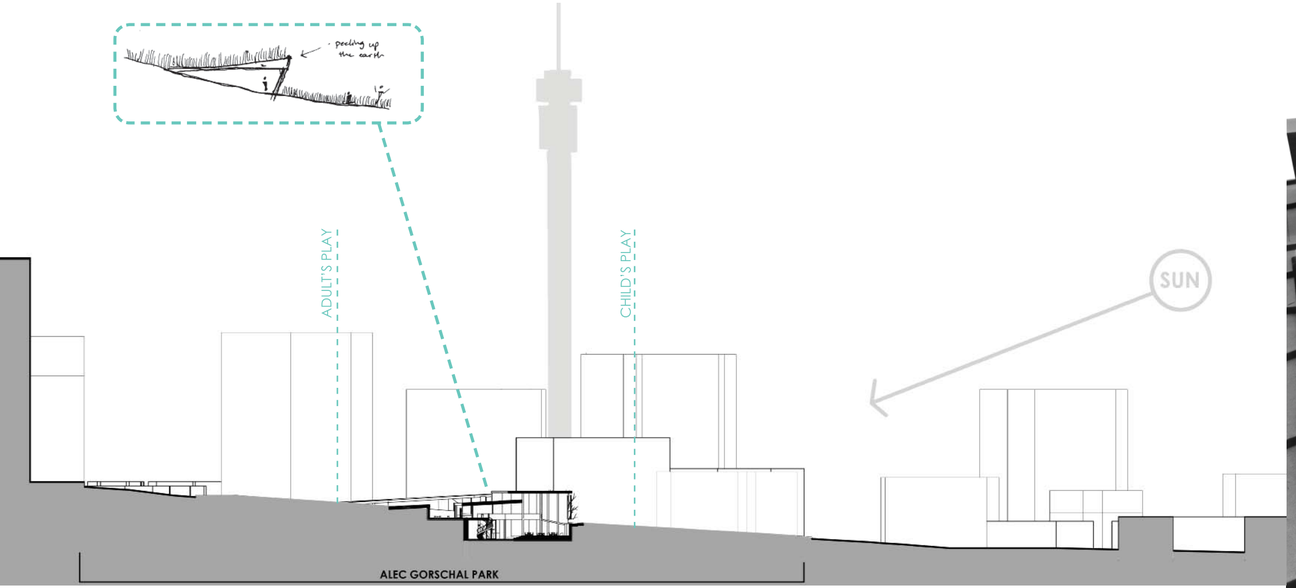
It was then decided that a split-level approach would be more appropriate, allowing visitors to enter from the park on a mezzanine reception level rather than having to descend into the service core underground.

The programme was initially arranged simply into the different fingers. It became clear, however, that connections needed to be made between the functions of those fingers and so organisation into 'quiet' and 'loud' groupings structured these connections.

Within the buildings themselves, particularly in the children's library and toy library, elements of child-centred design needed to be considered. Initially, the spaces were designed as a single, open-plan space with book and toy-shelves lining the walls (similar to the Cotland Toy Library). On further enquiry, it became clear that just as children enjoy the company of others, they also require small spaces to which they may retreat and through interactions with children, it became clear that children are drawn to little spaces and 'hidey holes'. In addition, the circulation was conceptualized as a journey and experience with which children could play. The last development of the interior spaces involved selecting materials which respond to children's play as well as taking note of the scale of a child in the design.

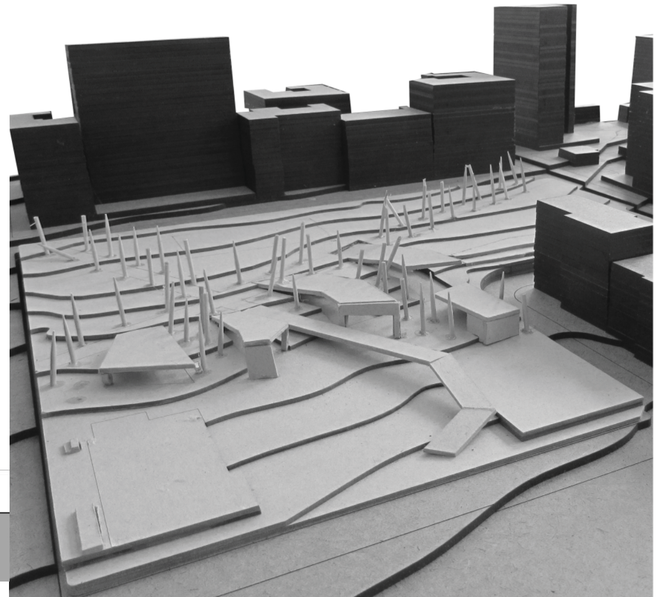


Early sketches of the sections & elevations



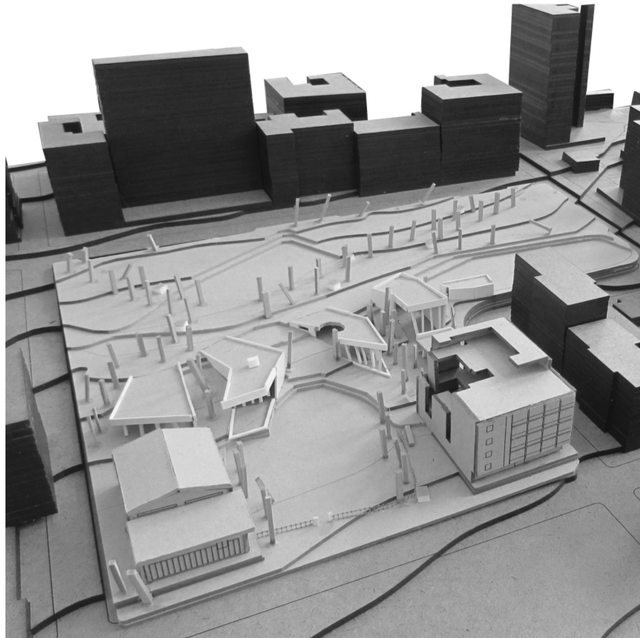
DEVELOPMENT MODEL 01

Early model showing the distribution of folies in the landscape as well as setting up the movement routes through the park.



DEVELOPMENT MODEL 02

Shaping the buildings to create a protected playground and re-organising programme in the park.



viii.

final design

The final design proposal: a children's institute in the form of follies integrated with the park landscape.

SITE PLAN



GROUND FLOOR PLAN

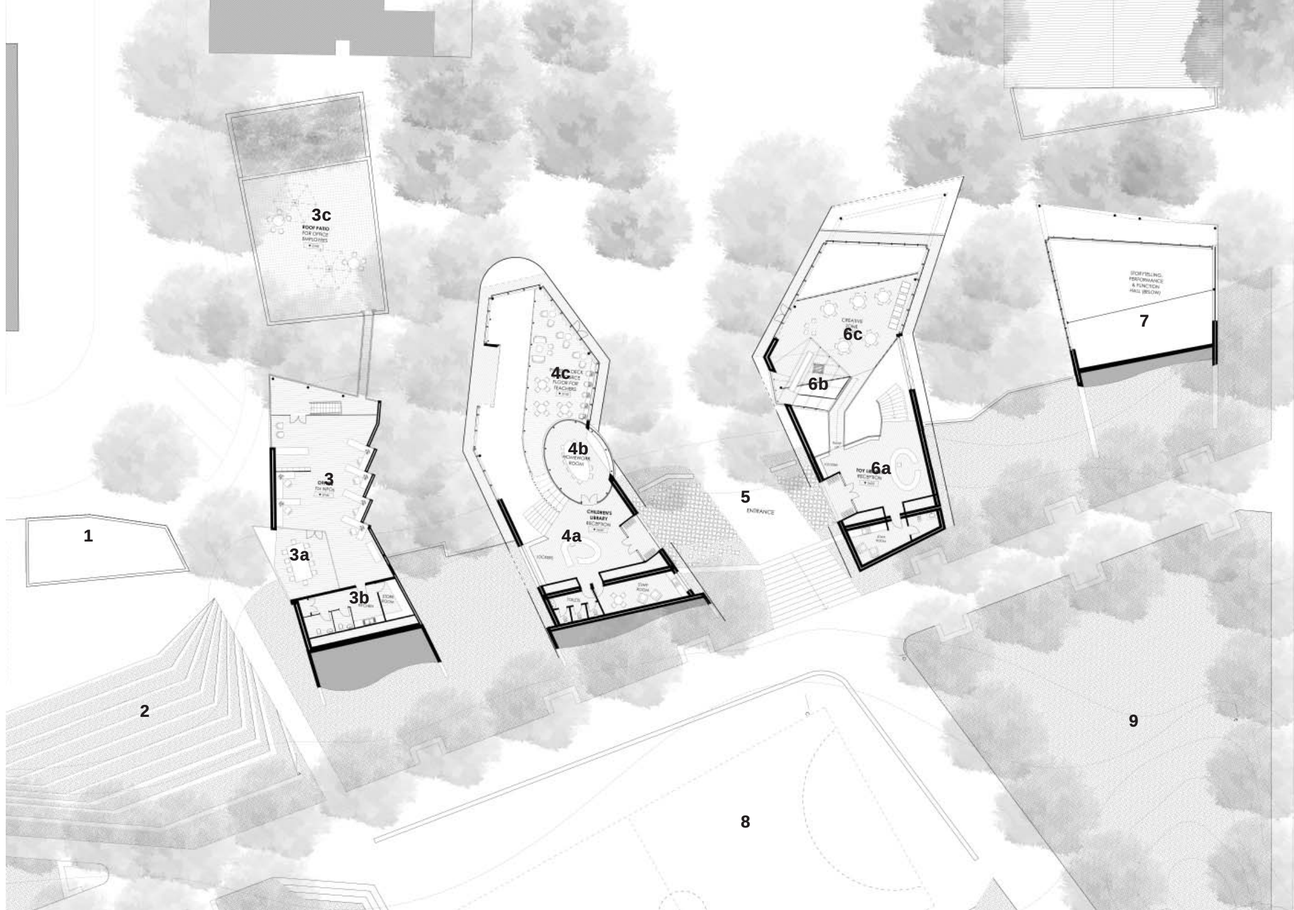
1. Toy Workshop
1a. Storage & Dump zone
1b. Loading
1c. Outdoor work space
2. Entrance courtyard
3. Admin Offices
3a. Conference room
3b. WC
4. Archives & Office
5. Reading Garden
6. Children's Library
6a. Storytelling circle
6b. Kids WC
7. Alice Rabbit Hole
8. Video Hire
9. Toy Library
9a. Jungle Gym
9b. Kids WC
10. Verandah
11. Play Courtyard
12. Tuck Shop & WC
13. Storytelling & performance Hall
14. Church Courtyard
15. Public Playground
16. Esisting Residential Building
17. Existing church





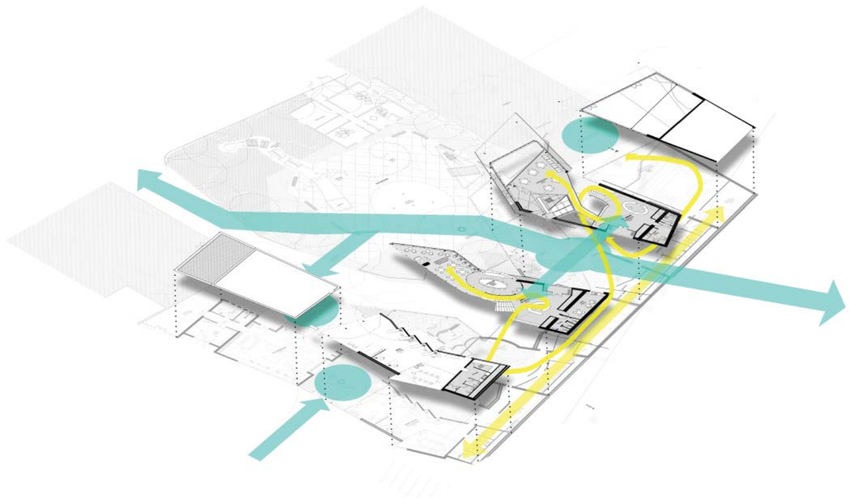
FIRST FLOOR PLAN

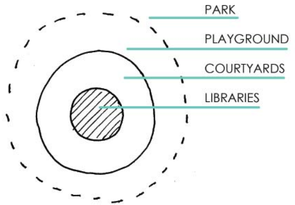
1. Public Toilets
2. Amphitheatre
3. NPO Offices
3a. Conference room
3b. WC
3c. Roof-top social area
4. Children's Library
4a. Reception
4b. Homework room
4c. Parents' Floor
5. Entrance Junction
6. Toy Library
6a. Reception
6b. Jungle Gym
6c. Creative Zone
7. Storytelling & performance Hall
8. Soccer Pitch
9. Lawns



CIRCULATION

On the level of the site, two main movement routes cut across the park. The libraries' entrances sit along one of these paths and then within, circulation becomes an experiential journey.

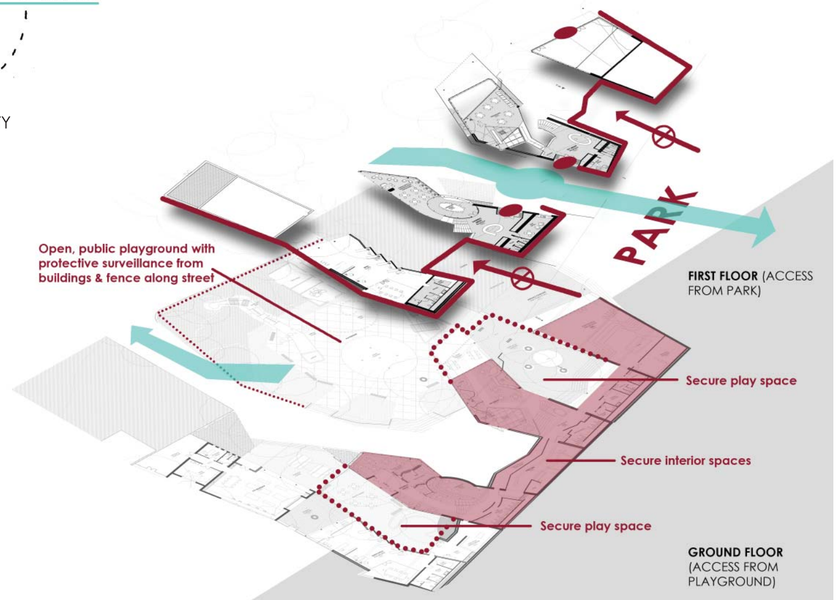


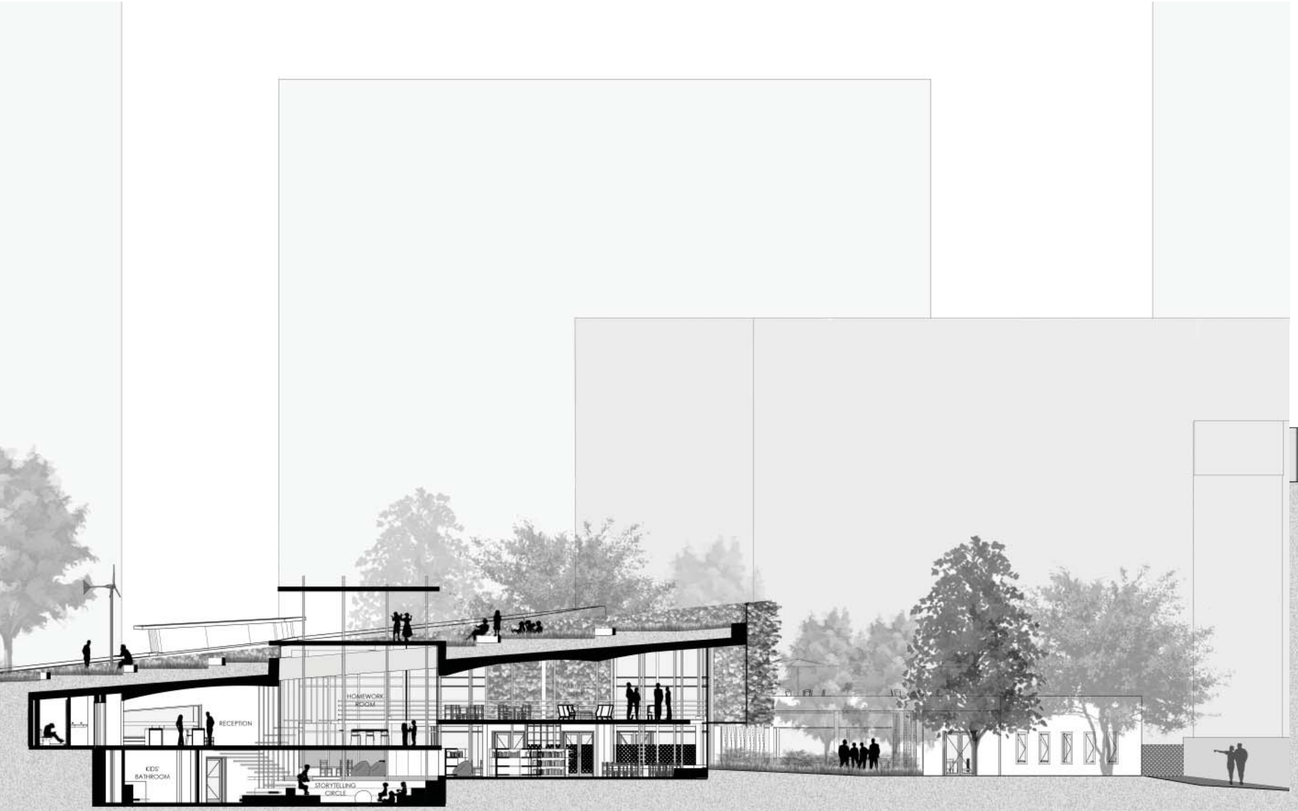


LEVELS OF SECURITY

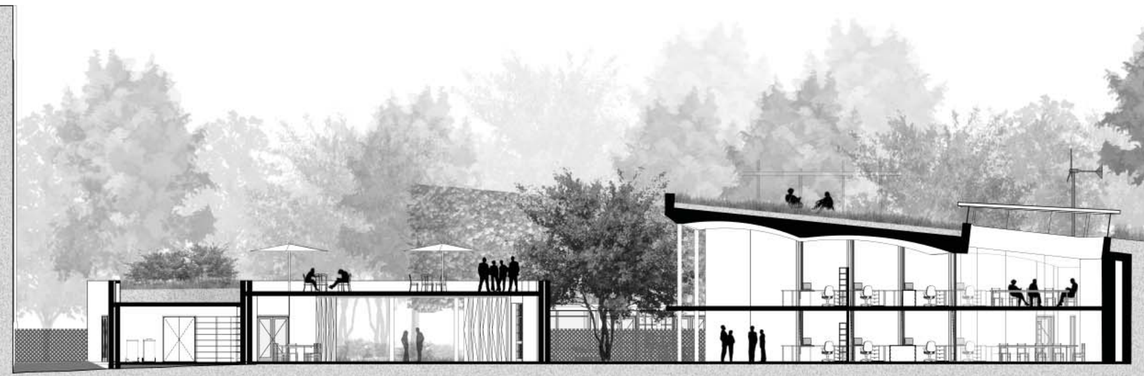
SECURITY

The buildings have been designed with increasing levels of security. A topographical boundary secures the courtyards from the park and control points at the toy libraries ensure safety within.

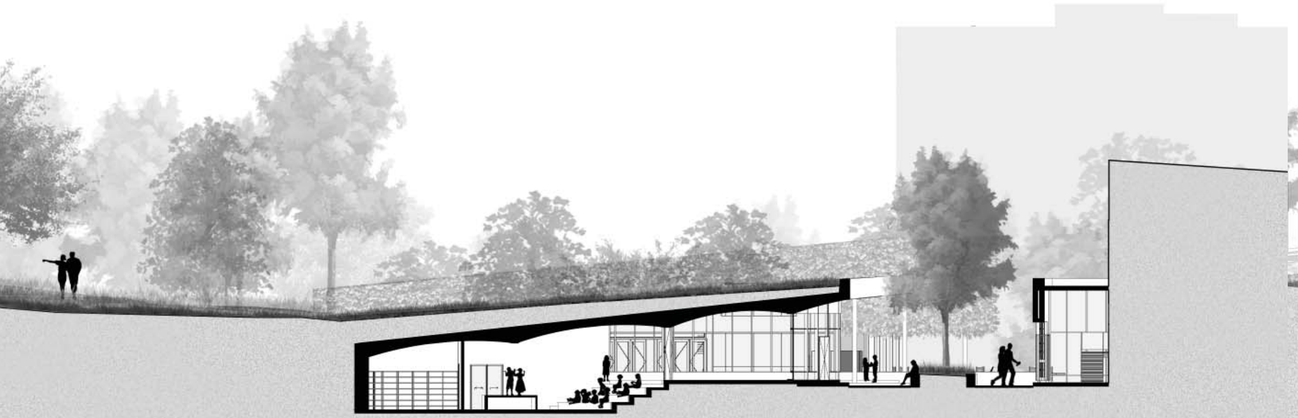




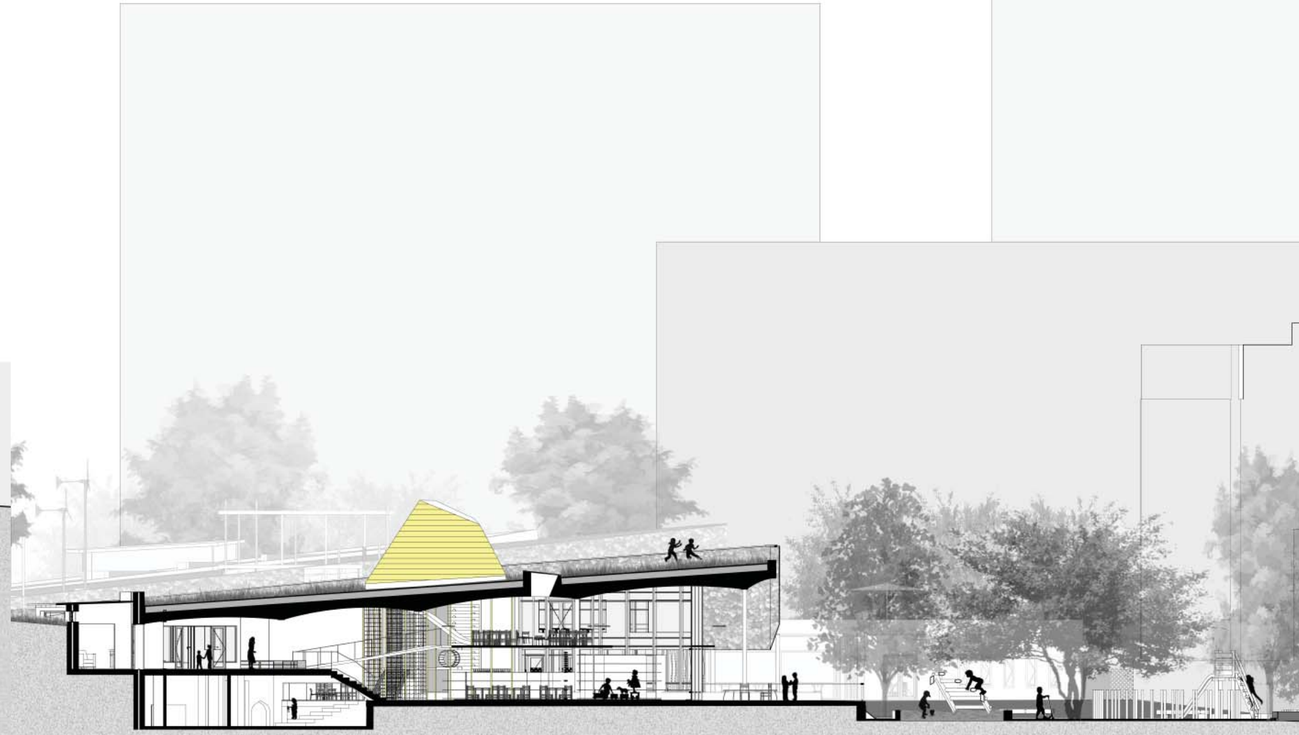
SECTION A-A
CHILDREN'S LIBRARY



SECTION B-B
TOY WORKSHOP & OFFICES



SECTION E-E
STORYTELLING & PERFORMANCE HALL



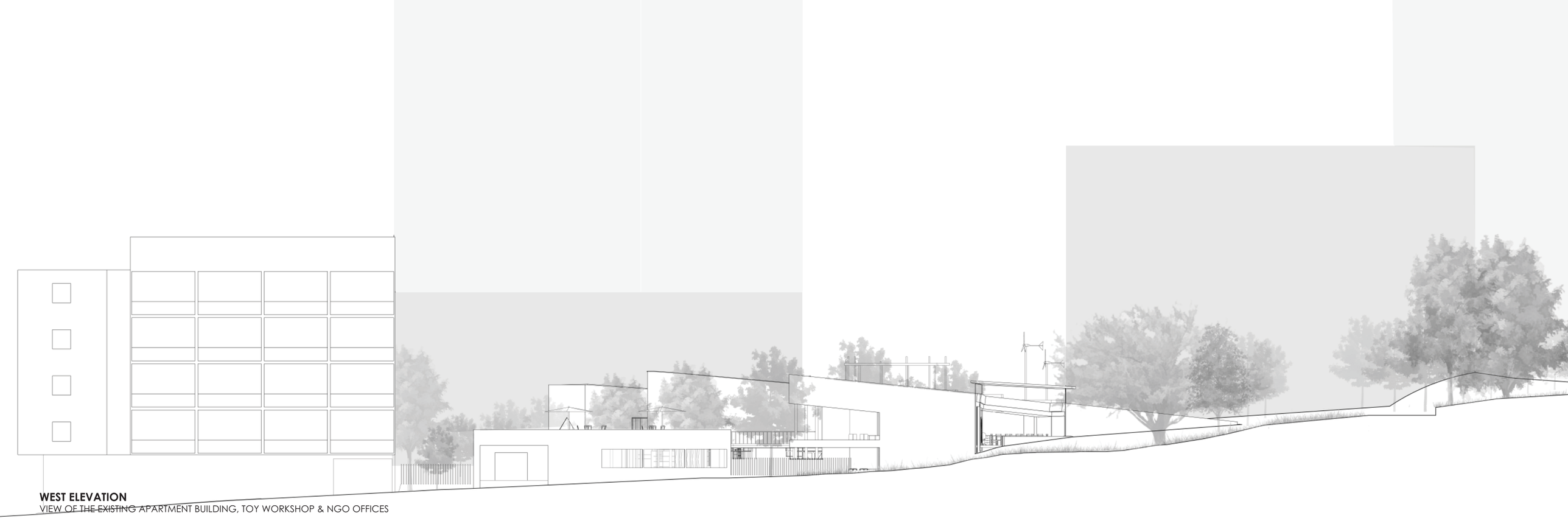
SECTION D-D
TOY LIBRARY



SECTION F-F
LONG SECTION THROUGH ALL BUILDINGS

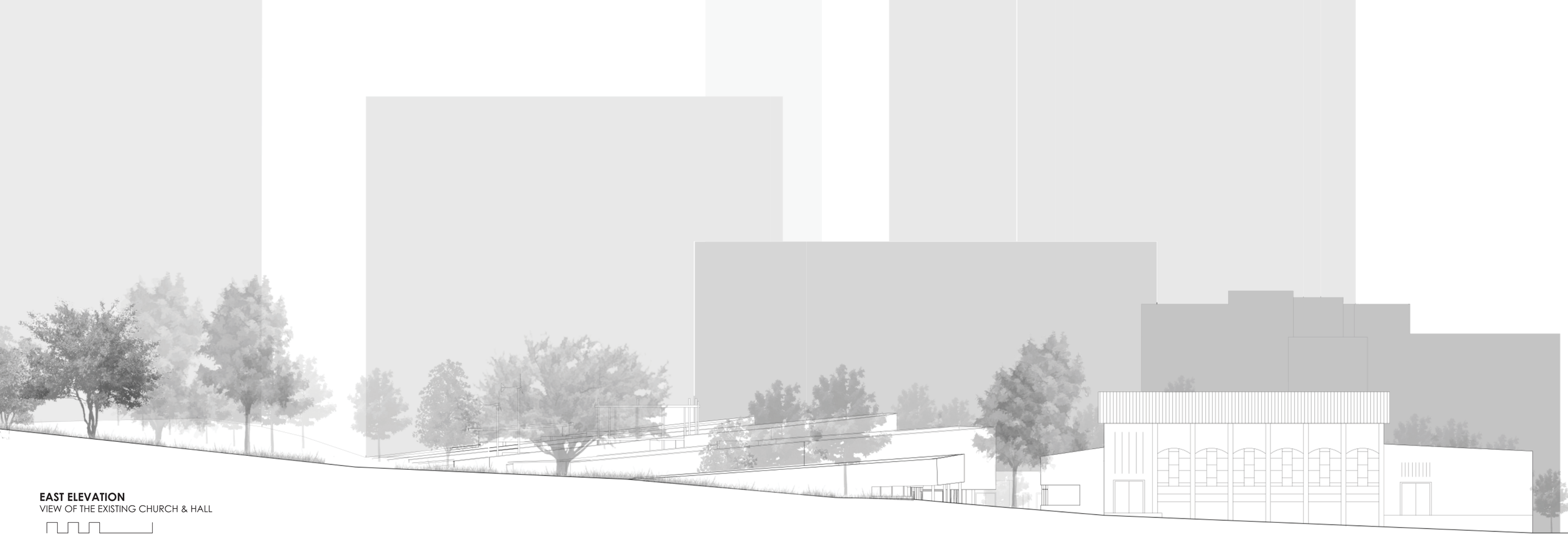


NORTH ELEVATION
VIEW FROM THE PLAYGROUND

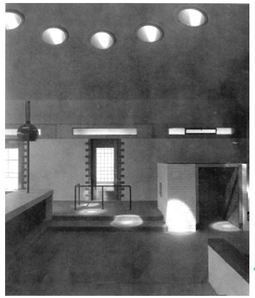


WEST ELEVATION

VIEW OF THE EXISTING APARTMENT BUILDING, TOY WORKSHOP & NGO OFFICES



EAST ELEVATION
VIEW OF THE EXISTING CHURCH & HALL





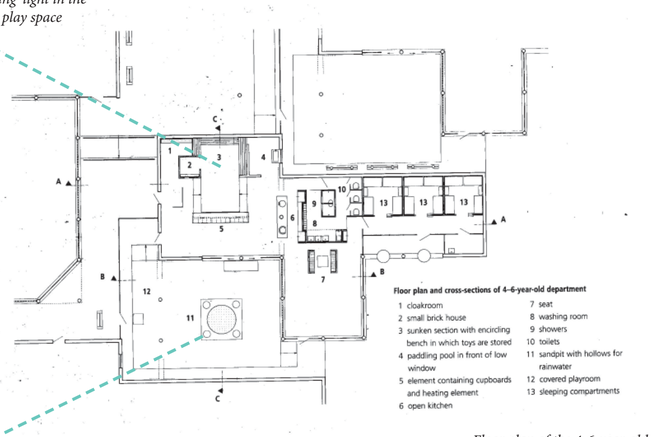
a toddler plays in the 'play house'

'dancing' light in the main play space





the sandpit as a focal point with surrounding 'magical' indentations



Floor plan of the 4-6-year-old department of van Eyck's Orphanage

a child 'plays' with the building







images from: Strauven, 1996 & Ligtelijn, 1999

ALDO VAN EYCK

ORPHANAGE

AMSTERDAM, 1955-60

Aldo van Eyck's buildings are full of thoughtful details that encourage a child to peep through, sit on, balance across or paddle in. Through his details he could evoke mystery and wonder in children hungry to engage.

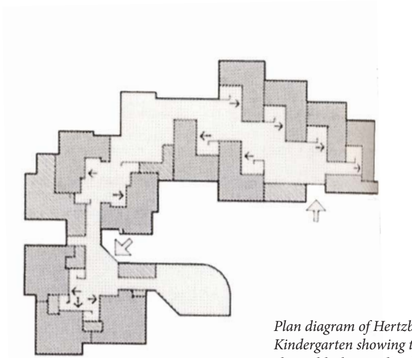
One example is van Eyck's *Orphanage*: a house and home for the unprotected child. It was designed to house approximately 125 children ranging from babies to fourteen-year-olds. Reasons for the children's stay included poverty, illness, imprisonment, death of parents or foster parents, neglect and irresponsible treatment.

According to Ligtelijn, the design consists of "a number of small-scale units for individual groups strung along traffic spaces of an even smaller scale, connecting them with some marked larger-scale communal elements." (p88, 1999) These 'traffic spaces' are conceptualized as an internal street which broadens into communal meeting squares along the way. This street is characterized by facebrick walls, stone-tiled floors and concrete columns, alluding perhaps to an outdoor space.

Each of the communal spaces programmatically connect directly to the requirements of the age-group it serves. The 10-14-year-old department, for example, contains a puppet theatre and sitting nook. The younger children (4-6-year-olds) have a sunken play-space with encircling seating in which toys are stored as well as a small brick 'house'. This demonstrates van Eyck's concern to let children be children and therefore not only design for the necessity of housing them, but design for their play too.

On this note, van Eyck's attention to detail can clearly be observed. Shelves and peeking-holes provide a child with spaces to store his toys and intriguing windows to anywhere. A ballustrade near the sunken playspace, provides additional opportunities for hanging or climbing while a small house-within-their-house acts as a getaway and play-house. Small recesses in the wall and stepped ground cannot be taken lightly as everything has a possibility of play for a child. The use of lowered walls also brings the building down to the scale of the child.

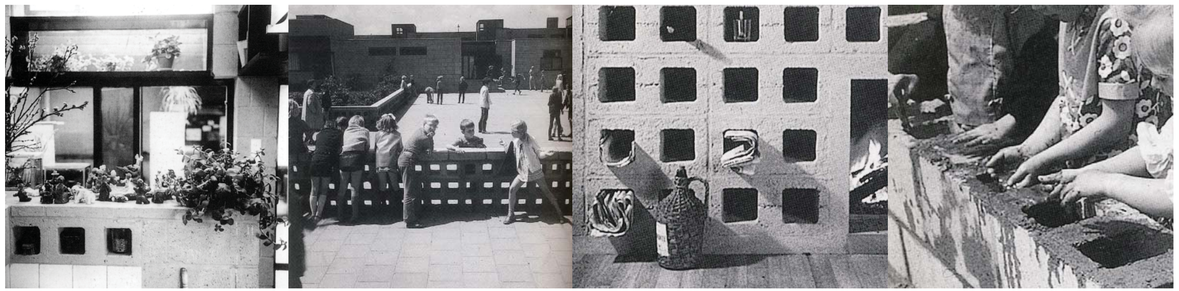
On a finer note, van Eyck added small mirrors to surfaces because, as Ligtelijn says: "ordinary building material does not glitter." (p99, 1999) The internal use of brickwork walls and benches topped with smooth slabs provides an interesting tactile experience and the use of simple, rose-coloured glass brings in elements of colour. Even around the sandpit, four circular dips were set into the slab. Virtually invisible when dry, they appear, as if by magic, after a rain-shower just as circles of light appear on the floor of the communal domed spaces when the sun shines.



Plan diagram of Hertzberger's Kindergarten showing the classes like homes distributed along the central hall.



Children in the hall playing with the stage.



Different uses of Hertzberger's perforated brick

all images from: Hertzberger, 1991

HERMAN HERTZBERGER

MONTESSORI SCHOOL

DELFT, 1960-66

In a similar way, Hertberger is concerned with the user's interactions with his buildings, designing them in such a way that the architecture can make an impact on human lives and vice versa.

His *Montessori School* in Delft, for example, takes into consideration the very specific needs of children from its overall layout to its fine details.

The design is similar to van Eyck's *Orphanage* in that its classrooms were conceived as 'little homes' along the school hall, the communal street. Designed, of course, with the Montessori philosophy and curriculum in mind this school takes into consideration the huge importance placed on the environment in a child's life. This includes attention to everything from the entrance as a meeting-place to small display windows for children's creations to the relationship between spaces.

The school is also conceived as a 'safe nest': a familiar space where you know that your things are safe and that you can simply 'be' without being disturbed by others. Hertzberger writes: "There can be no adventure without a home-base to return to: everyone needs some kind of nest to fall back on." (p28, 2009) This 'nest' is created through the small home-like classrooms in particular as well as the opportunity for the children to appropriate and lay claim to the space.

In the hall of the kindergarten section, Hertzberger built a square depression into the floor. It is filled with loose wooden blocks which, constructed as low stools, can be taken out by the children and easily used around the hall as trains, towers or simply for seating. The square hole itself evokes images of a lake or crater to which the children respond playfully by adding a 'diving board' for example, in their make-believe games.

Outside, Hertzberger created an equally interactive environment outside, using low walls of perforated blocks which contain spaces for sand-pits and gardens but can be used for other purposes as the need gives rise. The perforated blocks provide even smaller openings or compartments that can be used by the children to hold toys, make sand-cakes or plant flowers for example.

> "Some of them, for instance, become flower pots surrounding a small garden plot, while others, around a sand-pit, for instance were turned into containers sunk in a counter for the sale of 'ice-cream'. Or sticks could be put in the holes - and you had the beginnings of a tent" (p155, 2009)

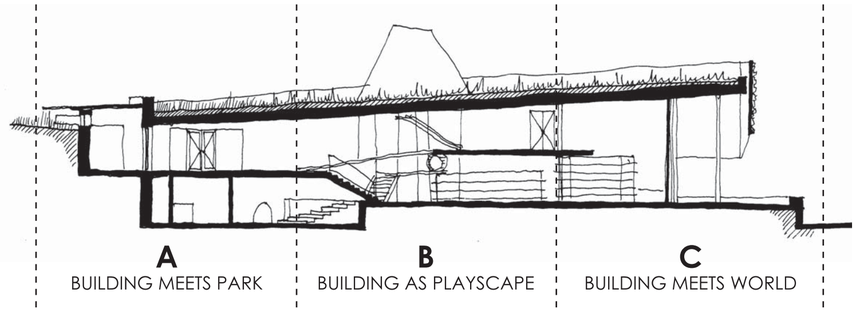
In short, the perforations (just like the rest of Hertzberger's design details) offered endless opportunities for play, engaging children's imagination and creativity.

ix.

technical component

This chapter explores the architectural design decisions and detailing in terms of its three main concepts: a) building meets park, b) building as playscape and c) building meets world.

Through these cross-sections, this chapter also discusses the ideas of landscape, materiality and scale which are essentially the architectural manifestations of the driving concepts.



In a building designed for children, the design essentially lies in the details, in the small things that will allow a child to interact with the building. The scale of a detail is, in a sense, the child of building. If a building is to be toy, then it must consider details as important. Mark Dudek describes Rudolphe Luscher's *Centre de Vie Enfantine* as follows:

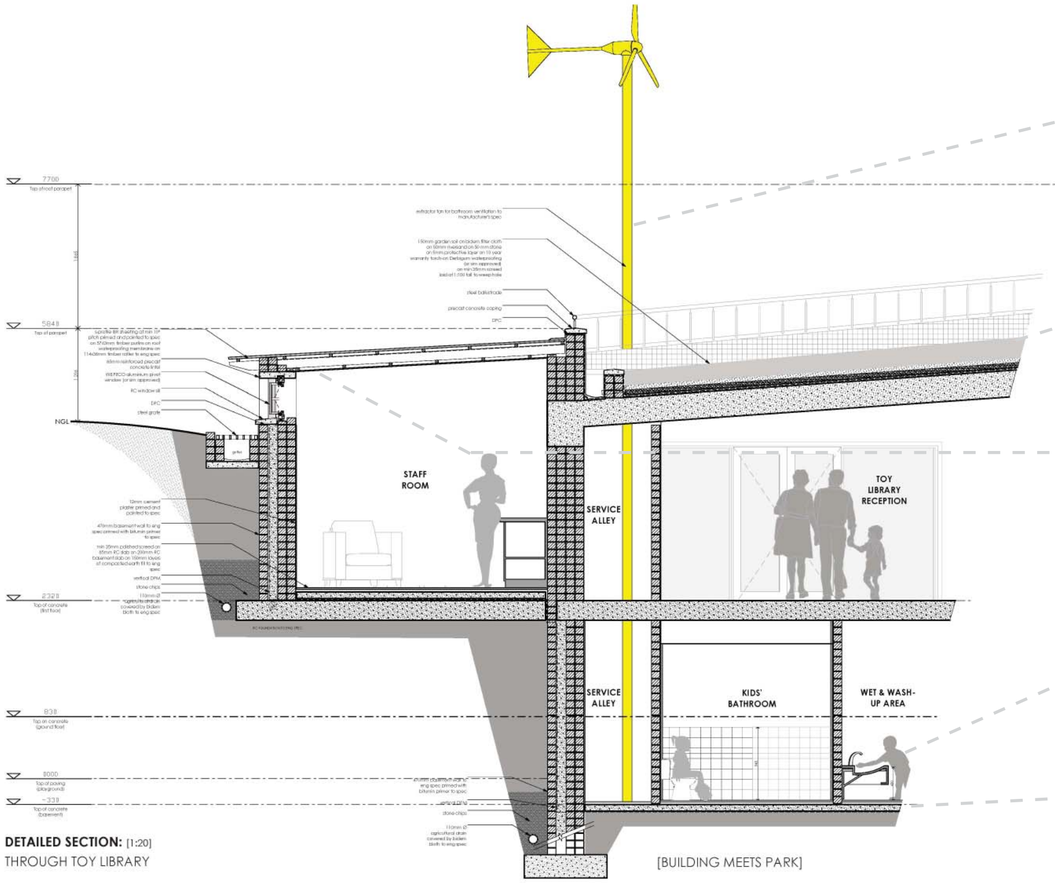
> "Fair-faced concrete is used effectively as an internal finish in the stair bays, with dry wall plaster and sliding timber partitions that recess into the wall bays when not in use. Interestingly, the children used the building much more efficiently in the first three months of its life prior to the introduction of toys, as if they were able to adapt it to be used as a toy in its own right - they occupied niches, experimenting and playacting freely in the different functional areas without distraction. 'The children's house was designed as a complete toy. The children noticed this immediately.'" (p84, Dudek, 2000)

(A) This section deals firstly with the building as an integral part of the park. With one of the leading concepts of the project being that of integrating nature, building and man, it is important to establish the reasons and technical reality of this.

(B) Secondly, it demonstrates the importance of materiality (in terms of both a healthy environment for children as well as a sensuous one). For young children in particular, "An environment of sensual variety with texture, sound, light and colour which challeng[es] and inspire[s] children, rich enough to provide cosy quiet spaces for withdrawal and security, as well as more open communal and social places for group activities; and an exciting outdoor space for freedom of movement and physical daring - all these [are] regarded as fulfilling the needs of children ..." (p7, ibid) This portion of the building further demonstrates the provision for play.

(C) Thirdly, this section demonstrates how the building meets the world and encourages children to go out and explore. It demonstrates the necessary child-scale of a building and its interface with the outside world.

In side-notes, each page discusses an element of the detailing important to Berea's children which is carried through all the detail considerations.



DETAILED SECTION: [1:20]
THROUGH TOY LIBRARY

A playful, colourful windmill functions as a mechanical ventilator for the underground bathroom. It makes use of natural wind while also brightening up the park landscape.

The landscaped play-roof visually links the toy library with the park. It is an extension of this small piece of natural landscape in the city and thus replaces what built form has taken away, onto the roof.

This roof physically separates the park from the landscaped Toy Library play-roof in order to create a secure outdoors play-space for the limited use of children.

Child-sized toilets and basins are an important element that allows children to feel more independent in being able to reach things on their own.

The building, buried in the earth, makes it a less intimidating mass for its small users and can also use the earth for its natural insulation.

[BUILDING MEETS PARK]

A
BUILDING MEETS PARK

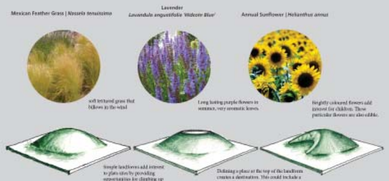
Nature

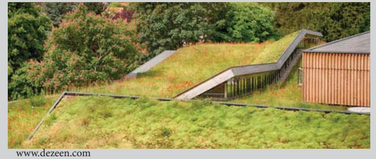
Equally important to a child's education is the natural environment. For this reason, roofs of the institute have been landscaped as if the buildings have been slid under the earth. The facade of the Toy Library and Children's Library is also planted with a deciduous creeper so that these city children, unaware to a degree of the changing seasons in the concrete world, become aware of the magical changes that occur in nature. As theorists believe, being in nature also makes children aware of their place within the world.

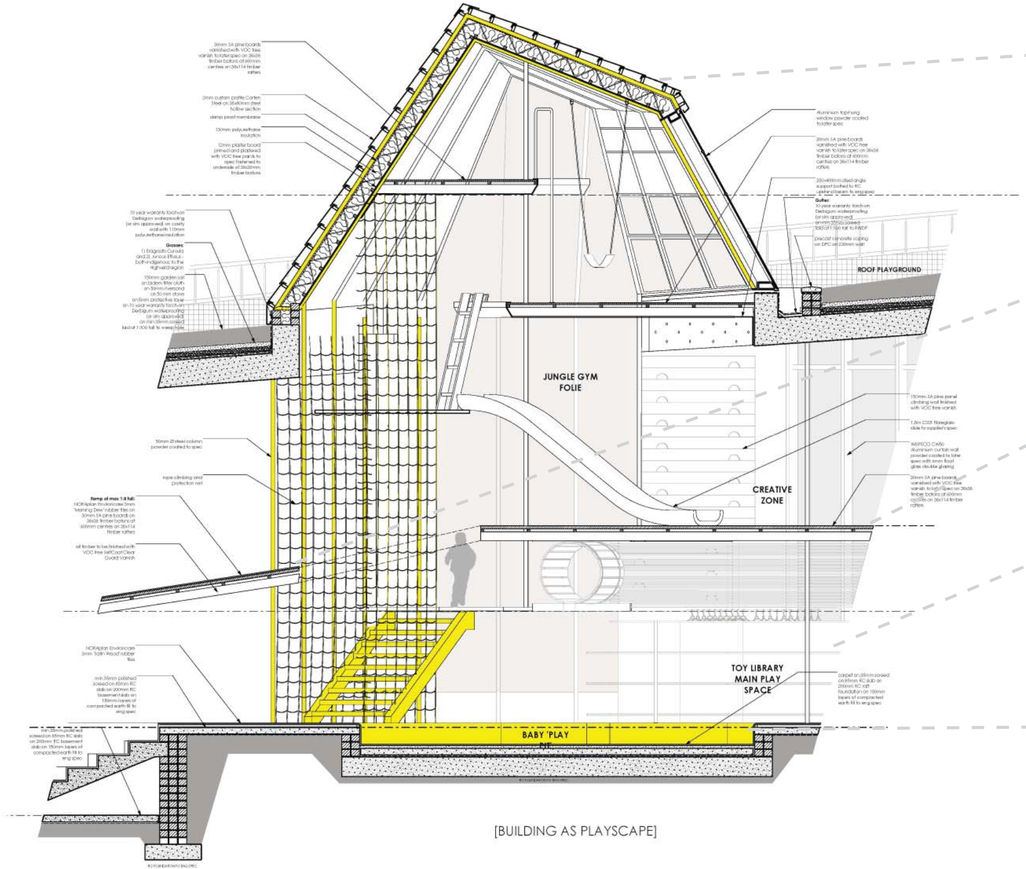
The permanence and grounded character of nature creates a feeling of security for the children yet the enticing outdoor spaces and internal playscapes also encourage the child to go out and explore.

Practically, landforms add play value to a site. This can be achieved through slopes, hills, steps and ramps. In addition, plants can be used to provide a variety of experiences for children. Below is a list of some of the plant qualities that can be used to help enrich these experiences:

1) **Colourful** - Plants that are colourful for a longtime.
2) **Touch** - Plants that have unique textures.
3) **Smell** - Aromatic plants.
4) **Creating Spaces** - Structural plants that can be used to create tunnels, walls, fences and rooms.
5) **Props** - Plants with interesting seed heads, stalks or twigs that can be used for play.
6) **Move with the wind** - Plants that act as "flags" and visually wave in the wind.
7) **Seasonal Change** - Plants that have year round interest with distinct qualities in each season.
8) **Edible** - Plants that can be eaten and that have interesting tastes. (p2, space2place, 2012)




www.dezeen.com



[BUILDING AS PLAYSCAPE]

A folly within the folly: a colourful structure punctures through the roof as an identifying element of the building. It houses what is central to that space: a play jungle gym which also carries children through the different levels and onto the roof.

The ramp between the levels adds an element for rolling down, riding on or climbing up. The varying circulation devices make for a varying experience.

Wooden floors on for the creative zone respond to children's 'stomping' with a resonant "clomp" every time they walk.

Toy shelves double-up as low walls for smaller spaces and 'play-houses' into which children can retreat, play, hide and move.

A sunken, carpeted toddler's play-pit allows mothers to bring their young children and play with them in their own space. The sides allow a parent to sit and interact or simple watch.

B
BUILDING AS PLAYSCAPE

Scale

Children are little people who experience the world from a unique angle. Scale, therefore, is a topic central to any project dealing with children. Ceiling heights, door handles, seat heights and stairs (to name a few) all need to take into consideration the scale of a child and his perception of any given space or object.

Maria Montessori was one of the pioneers advocating for child-sized environments. She wrote: "Children who see the smallest details of things in their reality, must look upon us, who project our own mental synthesis into what we see, as inferior creatures, incapable people who do not know how to look at things." (p72, 1936)

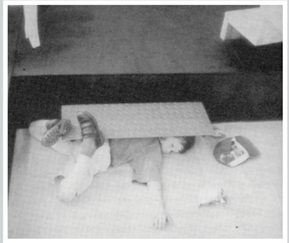
It may be observed that a child is most fascinated by the minute, mysterious details of life: from insects to plants to holes in the floor to tiny shoes for their little toys. It is no surprise that the play-things for today's children are miniatures of real-life and, as mentioned in previous chapters, the spaces in which they choose to play are also small, miniature spaces. It is then also in the detail of a building that a child may be fascinated and while the architect may 'play' with his design of the details, perhaps those details allow the child to play with them in return?



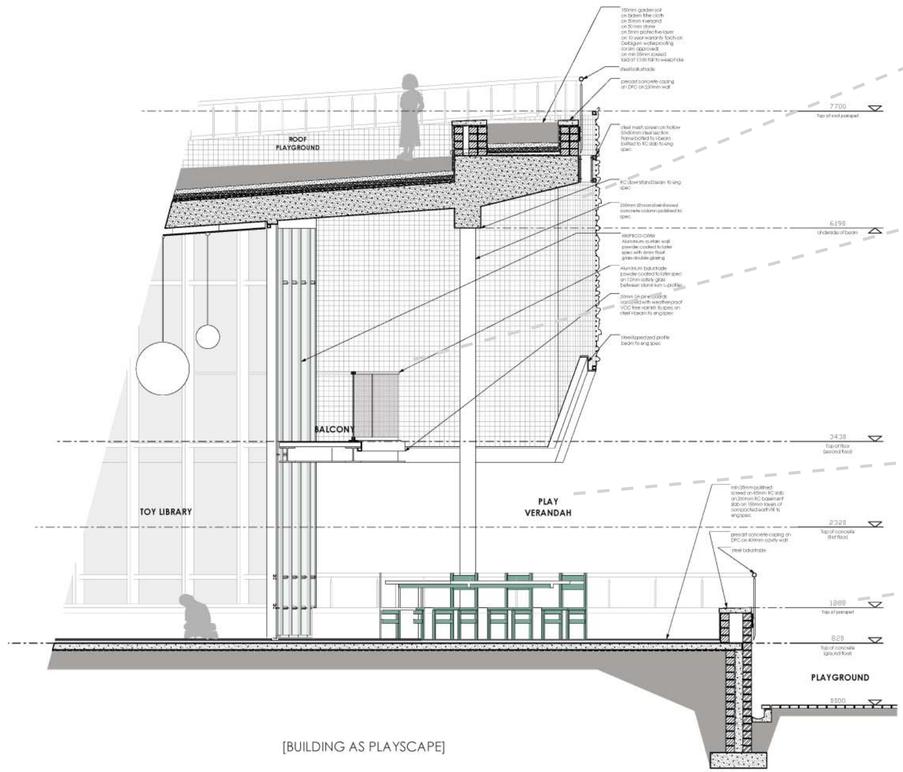
a wooden children's toy
www.handmadecharlotte.com



children's furniture & playthings
author's own



step detail in Peter Wilson's 'Blackburn House'
p8, Dudek, 2000



[BUILDING AS PLAYSCAPE]

A steel mesh screen planted with ivy acts as a sun-shading device and splits the facade into two. Essentially hung from the roof slab,

A light-weight balcony surrounds the second floor as a service alley as well as a covered outdoor space for Children to play on.

Child-scaled furniture and low boundary walls allow children to feel comfortable within their environment.

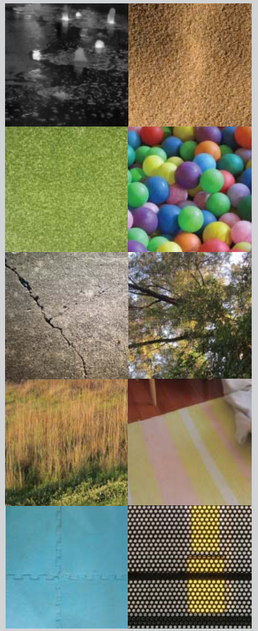
The paved playground meets the toy library with a low wall so that while the verandah is completely secure, it is still a part of the playground and children may interact with others over the level change.

Materiality

In designing for a group who tend to spend the majority of their time on the floor, who learn about their environment by tasting it or sticking objects in their mouths and who would rather feel, smell and listen to something than simply look at it, the material considerations become extremely important. Indeed, when designing for children one needs to consider both non-toxic materials as well as those with sensory qualities.

In his book, *Democracy and Education* (1915) John Dewey writes: "Before the child goes to school, he learns with his hand, eye and ear, because they are organs of the process of doing something from which meaning results." (p142) In addition, Hillbrow is a toxic environment for its inhabitants in that the buildings are now of poor quality, streets are strewn with litter and gutters reek of urine. A healthy building to which parents can safely bring their children, therefore, is of utmost importance.

It is the duty of architecture, therefore, to allow for good ventilation (circulating fresh air yet without creating a draft), to create a comfortable internal environment with adequate sun-shading and on a material level, specifying materials, paints, furniture (and plants) that do not emit dangerous gasses or contain poisonous chemicals. At the same time, these materials should engage a child's senses so that his sensory perception may develop to its fullest.

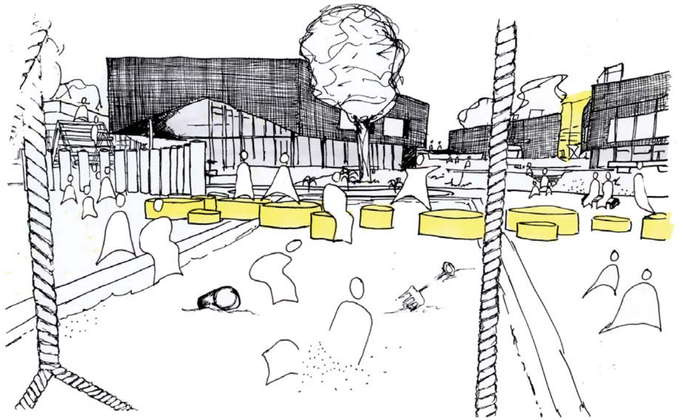


MATERIAL PALETTE FOR THIS PROJECT

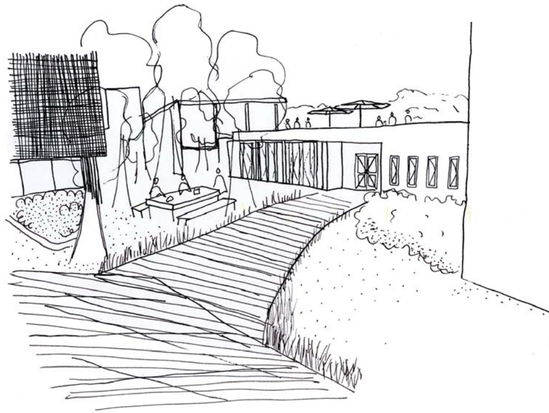
vi.

a visit to the toy library

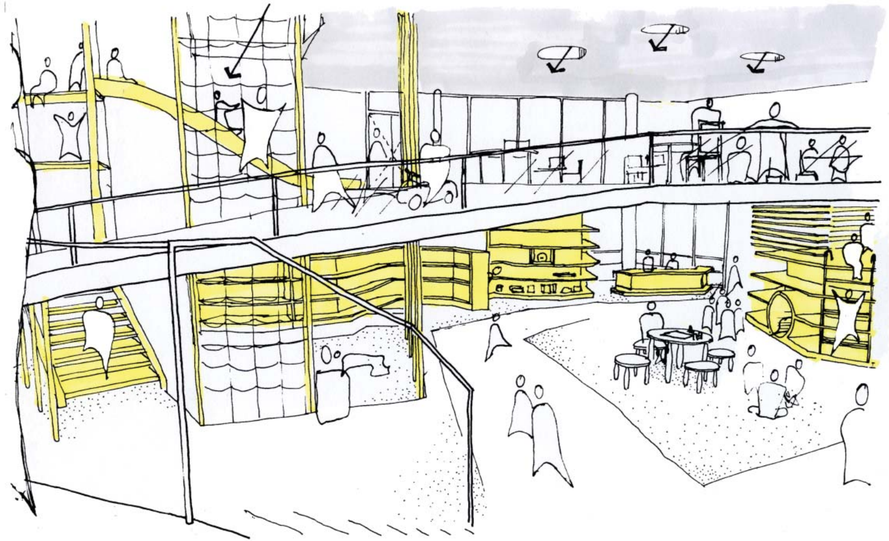
Once upon a time there was a little boy names Lucas who lived in Berea, Johannesburg with his parents and older sister. Both his parents worked and so every morning they dropped him at a crèche nearby for the day. The crèche had no toys and no space to play outside ...



... but today was the day they had a field-trip to the playground at Alec Gorschal Park. All the children played together in the sandpit, on the stepping stones, in the 'housey-housey' or in the water fountains while the teachers sat on the outskirts under the trees. This little boy particularly enjoyed the swings. He was confident enough to go quite high these days.



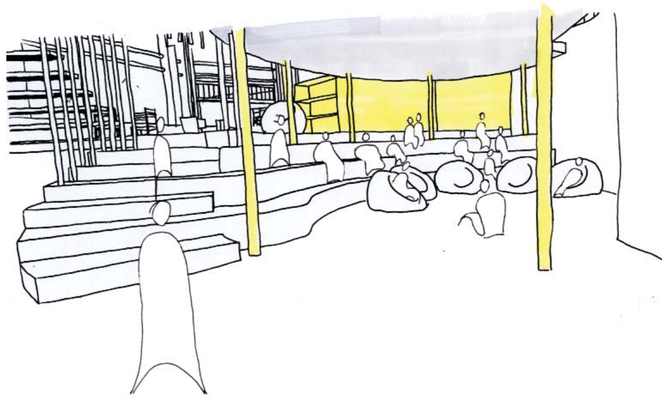
... after playtime, some of the children went back to creche with the teachers, others walked home with there parents and still others decided to go to the Toy Library. Lucas joined them. On his way up the hill, he spotted his uncle fixing toys under the trees just outside the toy workshop.



... Lucas first entered the Toy Library because he knew his friends would be there. After checking in with the receptionist he made his way to the creative zone upstairs where he could make a bow an arrow to play with his friends later. His sister was downstairs playing in the dress-up niche but she preferred to be left alone.



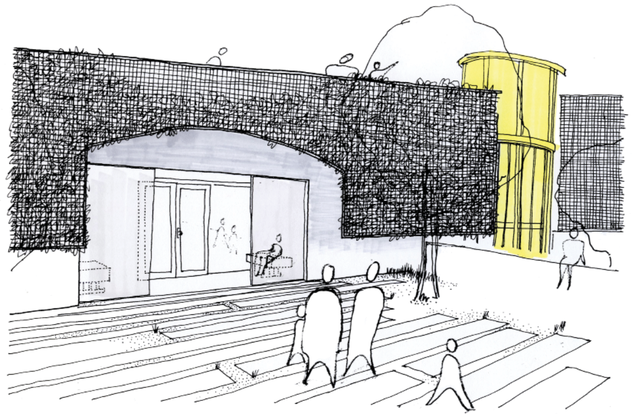
... Later, he went to the play courtyard to play some soccer. He wasn't very good, but the Toybrarians always encouraged him, saying that it doesnt matter if her isn't the best.



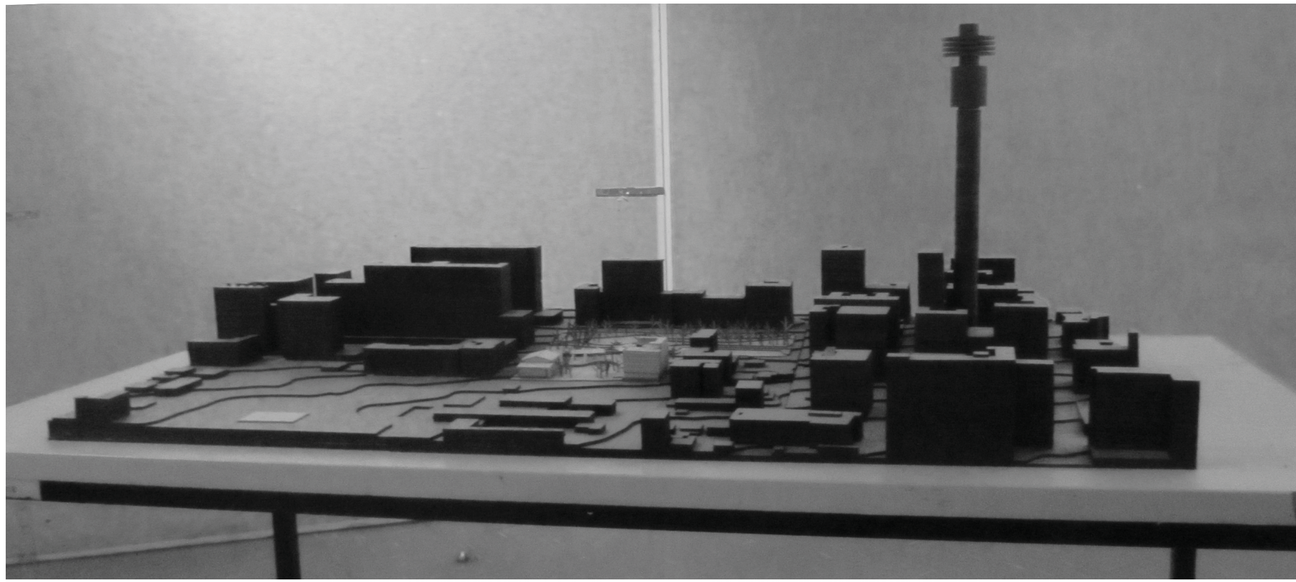
... Lucas was very tired after playing soccer so he crawled through the 'rabbit tunnel' to the children's library. It was quieter in there. He saw that it was daily storytime. Several children were sitting in the storytelling circle listening to tales of their ancestors.



... But Lucas' mother was going to be fetching him soon so he quickly walked past to the bookeshelves where he could take a book out to ask gran to read to him at home.



... He took his book with him to wait for mum at the entrance. While he sat on the bench, he waved at his friends going home. It had been a long day. He was now tired and ready to go home.

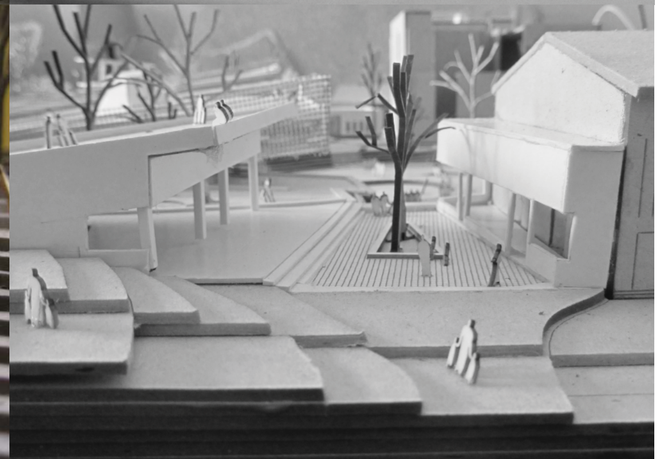


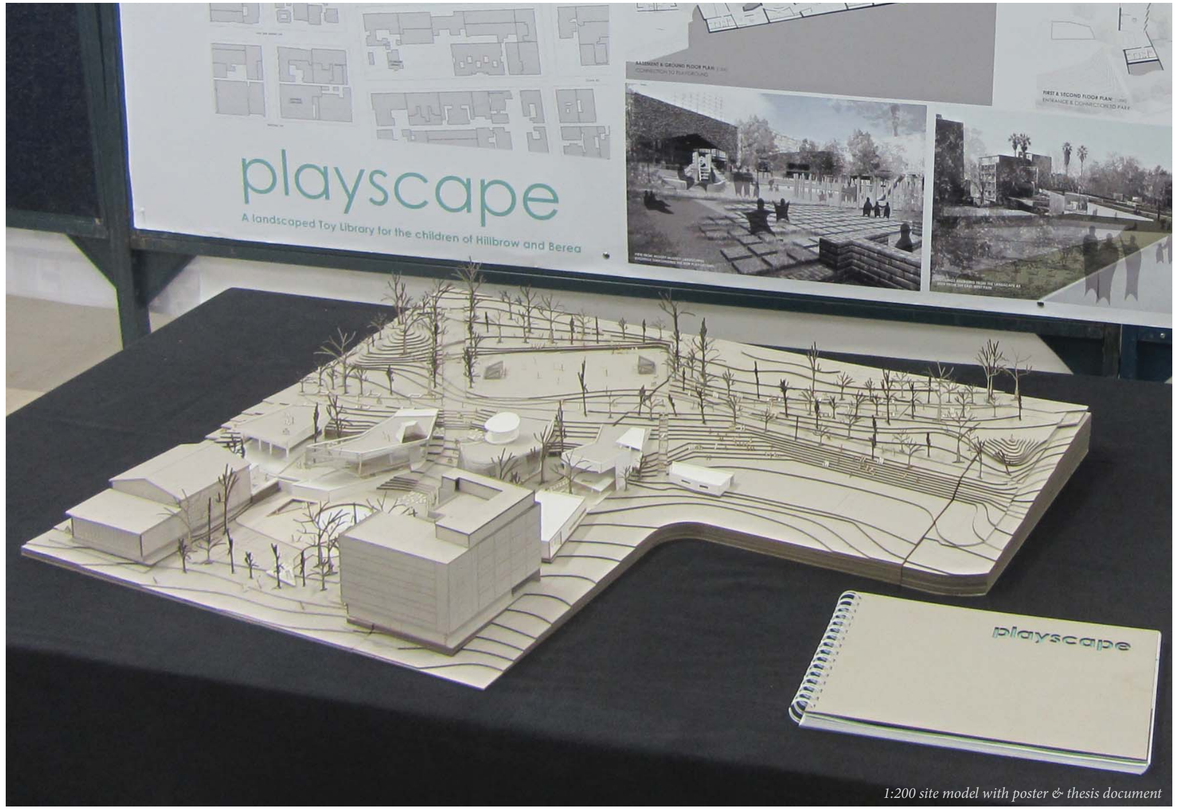
1:500 context model











1:200 site model with poster & thesis document

05.

BIBLIOGRAPHY & APPENDICES

BOOKS

Adams, Laurie Schneider. 2001. *A History of Western Art.*3rd edition.Boston: McGraw Hill

Amor, Anne Clark.1981.*The Real Alice: Lewis Carroll's Dream Child.* London: Michael Joseph Publishers

Archer. B.J. 1983. *Follies: Architecture for the Late-Twentieth-Century Landscape.* New York: Rizzoli

Ashford, Bridget. 1992. *An Evaluation of the Sunshine Centre Toy Library: Does the Toy Library provide an appropriate toy lending and supportive service to parents of children who have special needs?* Masters. Johannesburg: University of the Witwatersrand

Benjamin, Arnold. 1979. *Lost Johannesburg.* Johannesburg: Macmillan South Africa

Carroll, Lewis. 1990. *Alice's Adventures in Wonderland.* Great Britain: Dragon's World

Chipkin, Clive. 2008. *Johannesburg Transition: Architecture & Society from 1950.* Johannesburg: STE Publishers

Cohen, David. 1987. *The Development of Play.* London: Croom Helm

Dattner, Richard. 1969. *Design for Play.* New York: Van Nostrand Reinhold

Dewey, John. 1916. *Democracy and Education.* London: Macmillan

Dusinberre, Juliet. 1987. *Alice to the Lighthouse: Children's Books and Radical Experiments in Art.* London: Macmillan Press

Hall, Steven. 2012. *Steven Holl 1975-1998.* Tokyo: A.D.A

Hertzberger, Herman. 1991. *Lessons for Students in Architecture.* Rotterdam: 010 Publishers

Hurtwood, Lady Allen. 1971. *Planning for Play.* Great Britain: Jarrold & Sons Ltd

Kuznets, Lois Rotsow. 1994. *When Toys come Alive: Narratives of Animation, Metamorphosis and Development.* London: Yale University Press

Janson, A & Krohn, C. 2007. *Le Corbusier: Unite D'Habitation, Marseilles.* Stuttgart: Axel Menges

Klee, P. 1962. *The Diaries of Paul Klee 1898-1918.* Berkeley: University of California Press

Koste, Virginia Glasgow. 1978. *Dramatic Play in Childhood: rehearsal for life.* New Orleans: Anchorage Press

Le Corbusier. 1968. *Nursery Schools.* New York: Orion Press

Lefaivre, Liane & Doll. 2007. *Ground-Up City: Play as a Design Tool.* Holland: 010 Publishers

Ligtelijn, Vincent. 1999. *Aldo van Eyck:Works.* Basel: Birkhauser

McHale, Brian. 1987. *Postmodernist Fiction.* New York: Methuen

Montessori, Maria. 1973. *The Secret of Childhood.* London: Orient Longman

Norton, Donna, E. 2011. *Through the Eyes of a Child: An Introduction to Children's Literature.* USA: Pearson Education Inc

Palassmaa, Juhani. 2009. *The Thinking Hand: Existential and Embodied Wisdom in Architecture.* United Kingdom: John Wiley & Sons

Pryor, Colin. 1980. *Toy Libraries.* in: Wilkinson, Paul (ed.). 1980. *In Celebration of Play. London:* Croom Helm

Pulaski, Mary Ann.1973. *Toys and Imaginative Play in*: Singer, Jerome L. 1973. T*he Child's World of Make-Believe.* New York: Academic Press

Rosenthal, Eric. 1970. *Gold, Gold, Gold: The Johannesburg Gold Rush.* Johannesburg: Collier-MacMillan

Rosenthal, Eric. 1974. *The Rand Rush: 1886-1911 Johannesburg's First 25 Years in Pictures.* Johannesburg: A.D. Donker

Sadler, Simon. 2005. *Archigram: Architecture without Architecture.* Cambridge: MIT Press

Schofield, Angela. 1978. *Toys in History.* Great Britain: Wayland Publishers

Singer, Dorothy G. 1978. *A Piaget Primer: How a Child Thinks.* New York: New American Library

Singer, Jerome L. 1973. *The Child's World of Make-Believe*. New York: Academic Press

Stimuplay. 1992. *Planning for Play.* [leaflet]

Strauven, Francis. 1996. *Aldo van Eyck's Orphanage.* Amsterdam: NAi Publishers

Tatar, Maria.2009.*Enchanted Hunters: The Power of Stories in Childhood.* USA: WW Norton & Company Inc

Tate, Alan. 2001. *Great City Parks.* London: Spon

Tshumi, Bernard. 1987. *Cinegram Folie: Le Parc de la Villette.* Princeton: Princeton Architectural Press

van Eyck, Aldo. 1962. *The Child, The City and the Artist: An Essay on Architecture, The In-Between Realm.* ---:Sun

Wilkinson, Paul (ed.). 1980. *In Celebration of Play. London:* Croom Helm

Woolf, Jenny. 2010. *The Mystery of Lewis Carroll: Discovering the Whimsical, Thoughtful, and Sometimes Lonely Man who Created Alice in Wonderland.* Great Britain: Haus Publishing

INTERNET SOURCES

Anon. Joburg Inner City Urban design Implementation Plan. availabe at: www.joburg-archive.co.za/2011/inner_city/udip2009_part3_pg34-43 [Accessed 14 September 2013]

Anon. 2008. Unicef Nation Building from the start: Early Childhoood Development [online] available at: www.unicef.org/southafrica/SAF_resources_kbsreport.pdf [Accessed 17 March 2013]

Anon. (ITLA) Things to Think About When Planning a Toy Library. [online] available at: www.itla-toylibraries.org/assets/.../Hints_on_Planning_a_Toy_Library.pdf [accessed 12 March 2013]

Anon. 2012. Australian Innovator Plans first South African Toy Fair. [online] www.bizcommunity.com/article/196 [accessed 18 February 2012]

Department of Education. 2011. Gauteng Department of Education Annual Report 2011-2012. [online] available at:www.education.gpg.gov.za/.../Annual%20Report%202011-2012.pd [Accessed 03 May 2013]

Schaffler, Alexis (GCRO). 2013. State of Green Infrastructure in the Gauteng City-Region. [online] available at: www.gcro.ac.za/sites/default/files/reports/sogi_final.pdf [Accessed 04 September]

PERSONAL CORRESPONDENCE

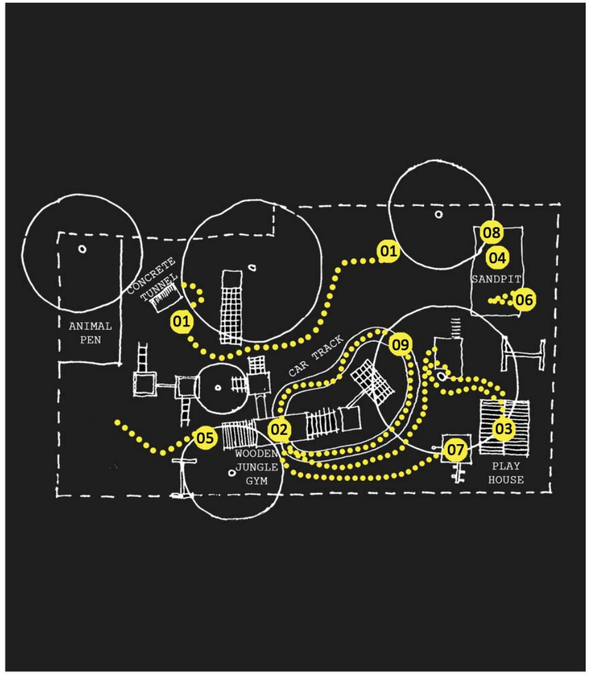
Confidential interviews with users and residents at Alec Gorschal Park. Conducted during June and July 2013

van den Bussche, J (2013) Architect and urban designer (expert on Hillbrow and surrounds). Personal correspondence via email, 6 August 2013

APPENDIX

A

LOCATION OF PLAY IN PLAYGROUND



SUMMARY OF ADDITIONAL GAMES OBSERVED

	GAME		DESCRIPTION	PROPS USED
.04.	**"Servant girl"**		6 Children play in the sandpit, making a sand mountian and pouring sand down a slide. Central to their game is the child who is nominated the 'servant' and the rest order her around, shouting commands.	 Buckets, sand
.05.	**"Surfer boys"**		3 boys play on a netted jungle gym. This is their boat,m but then it breaks. They want to make a new 'boat'. At one point the 'leader' picks up slabs of slate and says that that is their surf board which they can use to build their boat.	 Net Jungle Gym, Slate slabs
.06.	**"Sand Babies"**		4 girls are playing in the sandpit. Then one gathers some in her skirt, walks over to the side, puts a bucket down and empties her skirt's contents into the bucket pretending to put her 'baby' in a 'cradle'. The rest follow.	 Clothing (eg. skirt) , Bucket, Sand
.07.	**"Space Adventures"**		Four children are playing together. They imagine that they are in a spaceship. Suddenly one gets off having been 'caught by a robot' and runs around waving his arms. The others follow. The leader 'lands in a different country' and imagines more boats and monsters.	 Steel jungle gym
.08.	**"Baking Cake"**		Two girls are playing in the sandpit. One act as the cook, mixing sand in a bucket with a spade, while she orders the other to 'get more chocolate'.	 Bucket, Spade, Sand
.09.	**"Policeman"**		One boy is driving a 'car' around the car track. He stops and tells a boy standing on the side to be the policeman. He needs a policeman because "poeple drive too fast". He continues driving while other boy doesn't really involve himself.	 Scooter, Car track