

## *Growing Up*

Why Nature is Essential  
in Residential Areas



## *Biophilia*



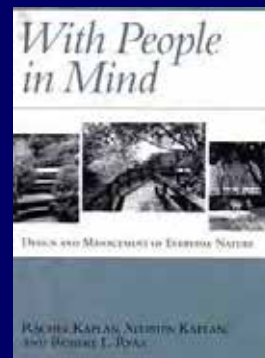
## The Biophilia Premise

### *Hypothesis:*

humans have  
an innate preference  
for natural landscapes & respond  
positively to both  
viewing & being in Nature

### *Biophilic design:*

design of built environment which fosters  
people's interactions with Nature



## Design Implications 1

Research into human health & preference shows:

People need spaces  
with opportunities for:

- *Control*
- *Privacy*
- *Socializing*
- *Physical exercise*

## Design Implications 2

Natural spaces will be restorative if they  
provide:

- *Fascination:* effortless attention
- *Sense of being away*
- *Extent:* sense of being part  
of larger whole
- *Compatibility*

**Parks & public spaces can do this!**

## Ethical Implications



## Children & *Nature*



### What is it?

*"What is it, then, about nature that so attracts, stimulates, and retains the child's attention to the degree that it appears to exert a significant effect on childhood maturation and development?"*

Kellert 2002

### Childhood Remembered

Memories of favoured childhood places are most often

**Parks**

**Hiding spots**



**"Leftover spaces"**

**Wild & untamed**



### What Children Remember

**One study of adult memories:**

95% remembered outdoor experiences of childhood more vividly & fondly than other experiences

**Clare Cooper Marcus (1978) survey of university students' memories of favourite childhood places:**

86% of environments recalled were outdoors

### Nature Essential for "Growing Up" 1

**Direct & indirect experience of Nature:** critical component in human physical, emotional, intellectual & even moral development

**For adults:**

contact with **Nature** has restorative & healing benefits

## Nature Essential for "Growing Up" 2

### For children & adolescents:

Nature provides an opportunity to develop, learn & grow up

## How Children Begin...

- children begin with **personal, local & emotional responses** to Nature
- over time: replaced with **social, global, & logical reflections** as children near adulthood
- **Linking specific instances of learning to contact with Nature:** strong argument for impact on human development

## How do children learn to value sustainability?

The environment is a communicating medium.

It communicates what we value.



## Ecological Learning

### Diversity of city or urban environments:

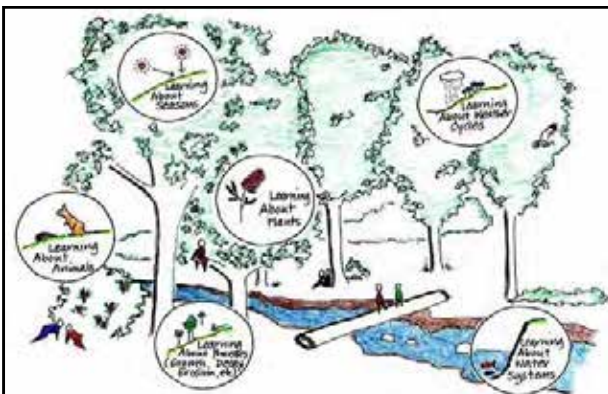
- learning ground for children's ecological values

### Creating sustainable environments communicates that sustainability:

- educates children (and adults) to value sustainability

### Valuing sustainability & intergenerational equity:

- communicates that we value children & their futures



Ecological Learning

## Children & Development 1

### Direct, spontaneous & everyday interactions with Nature:

give children opportunities for physical, emotional, intellectual & moral development



## Children & Development 2

Children can...

1. Learn to count, classify & organize
2. Recognize cause & effect
3. Take risks & experience consequences
4. Be alone
5. Observe & learn to socialize
6. **PLAY**



*The king of the skies*

Even Microsoft understands ...

## DESIGNING FOR PLAY

Play: significant shaper of adult intelligence, values & self-sufficiency.

"The work of childhood"

80 percent of a child's learning occurs before age 8.

## Why is play important?

Play is children's way to..

- ◆ discover their social & natural environments
- ◆ be introduced to a world beyond their families
- ◆ learn to function on their own
- ◆ build feelings of self-confidence & self-esteem

# What Children Need



# Children Prefer

refuges  
access to adults  
wild spots  
privacy  
malleable materials  
challenges  
sensory diversity  
safety  
adaptable environments  
water

# Designing for Children's Play 1

## Outdoors

most significant setting  
for children's unstructured play  
& everyday activities



# Designing for Children's Play 2

Creativity &  
extent of play  
influenced by:

- Equipment
- Materials
- Design of landscape
- Amount of vegetation, particularly TREES



# Play Needs

For children in middle years (6-12)

- Convenient access within walking distance at neighbourhood scale
- Variety of diverse play spaces:
  - formal & informal
  - for all types of play
- Safety
  - from cars
  - unwelcome older children or adults
  - extreme injury
- "Wild" & natural spaces to explore
- Stimulating & manipulative components:
  - sand play
  - raised garden beds
  - interactive sculptures
  - fountains

# What Children Need in Parks 1

1. **Accessibility:** outside & within park
2. Safe & graduated **challenges**
3. **Diversity of settings** & spatial experiences: retreats & opportunities to play above ground
4. **Flexibility & open-endedness:** elements can be moved & manipulated by both children & adults
5. **Defensible,** visible space for safety

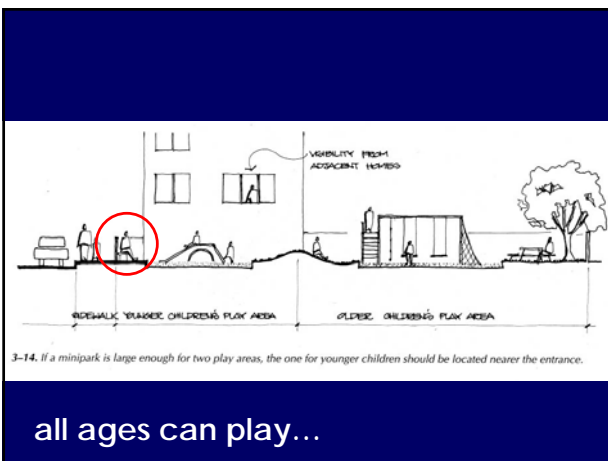
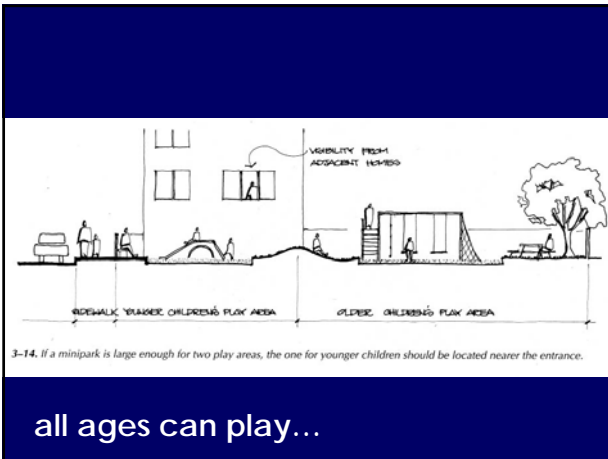


## What Children Need in Parks 2

- 6. **Supervision:** greater range of activities
- 7. **Permanence:** a familiar, identifiable space
- 8. Elements **change over time:** seasons & events
- 9. Design for **year-round use**
- 10. Multisensory **stimulation** & clues
- 11. **Shelter**

## What Children Need in Parks 3

- 12. **Spaces for social interaction among groups:**
  - many sizes
  - different ages
- 13. **Defined play areas** for children of different ages
- 14. Spaces for **interacting with plants & animals**
- 15. **Orienting devices:** visible completion points & landmarks






## PLAY DIVERSITY AND NATURAL PLAY

### Diversity of Play Opportunities

- Variety of play environments
- Different & appropriate locations
- Variety of spaces, surfaces, levels & plant materials
- No one location sufficient
- Provide for all types of play



### Multiple Levels of Activities




### Who chose these play sculptures?





## Hard & soft play surfaces

### Mix of surface treatments

- Open grassed areas
- Variety of hard-surfaced areas:
  - wide pathways
  - small areas off main circulation route



Make sure you don't forget the basics!





# NATURAL PLAY

- helps children build, develop & learn through doing
- Wooded areas, creeks & watercourses for exploratory & fantasy play



## TREES



*"Trees become entire environments for children."*

Clare Cooper Marcus, 2001



## URBAN BUSHLAND

- ❖ 'wild' areas contain few overt messages about what children 'should' do
- ❖ valuable educational resource
- ❖ protect & encourage animals & birds



## Water Play



## Water Play



Remember...

We get about in public...



We create in public...



We socialise in public...





And we socialise in public...



We people the public realm...



# Risky business

By Brendan Gleeson

# The bubble-wrap generation

On their screens, they can vanquish invading hordes, but in the real world, today's kids can't even walk to school without Mum. Have we taken the idea of protecting our children too far? *JANE CADZOW* reports.

## WHY CAN'T BOYS AND GIRLS GO OUT TO PLAY?

By Mary Ann Sieghart

THEY are being encouraged, encouraged on the one hand, that they should go out and play. But in the real world, today's kids can't even walk to school without Mum. Have we taken the idea of protecting our children too far? *JANE CADZOW* reports.

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## Children's shoes have far to go

Start-rite

Far to go?

