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# Nature of Place Symposium

## *The Lost Language of Love in Architecture*

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SHEPLEY  
BULFINCH





Our challenge...  
Our opportunity.





Design aesthetics as driver.



Prioritizing efficiency and cost control.



Are you feeling the love?





# *Biophilia*

“Our  
passionate love  
of life, and all  
that is alive.”

Erich Fromm

1964



# Biophilia and Well-being

- Physical
- Mental
- Emotional





# Why is this essential?

Urbanization has increased

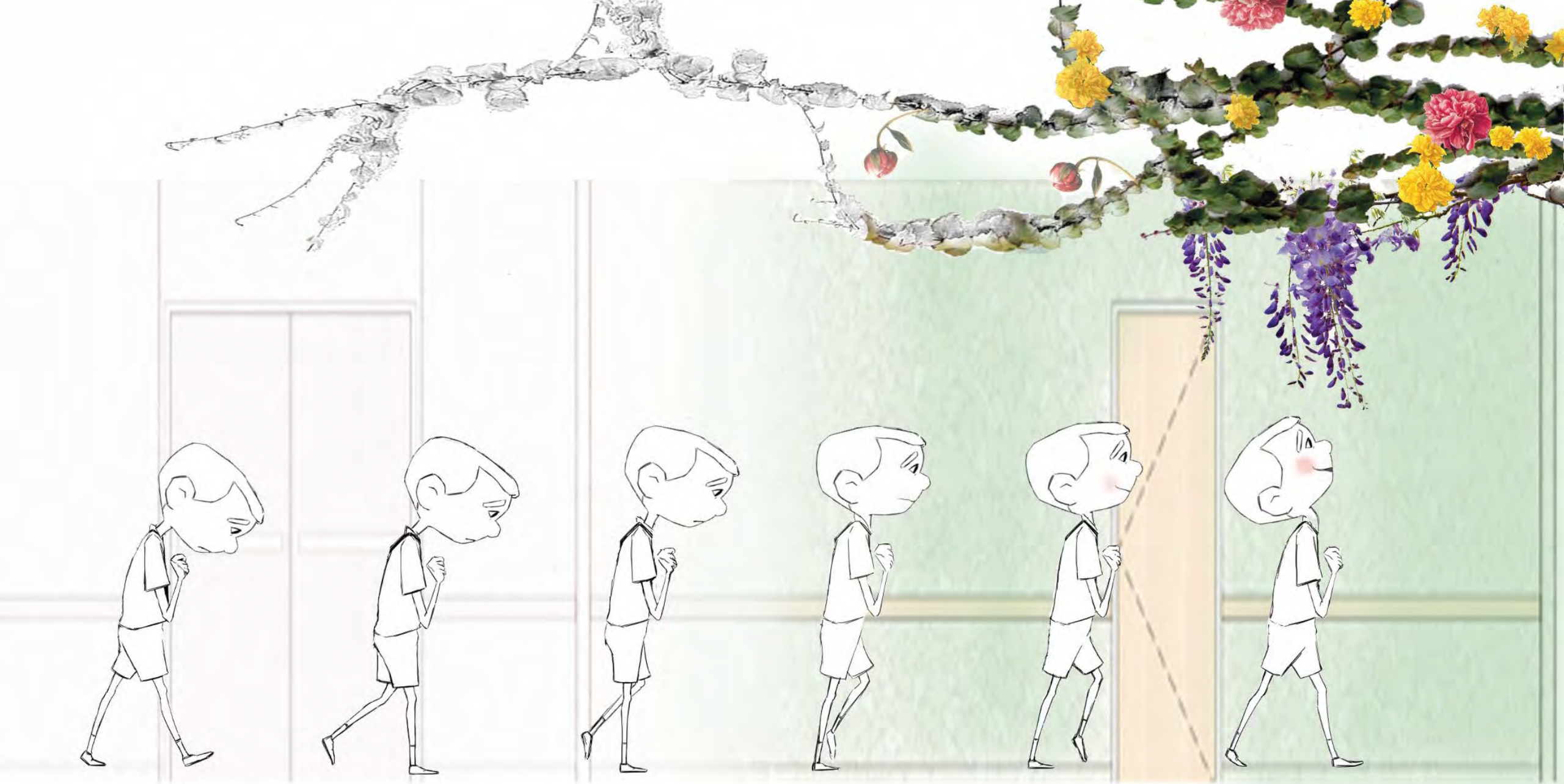
- Stress
- Crime
- Absenteeism
- Depression



# Biophilic Design

Fostering of human-nature connection in the built environment.





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# The Value of Biophilic Design

Community

Development

Healthcare

Retail

Workplace

Education

# The Value of Biophilia

- Stress reduction
- Community connection
- Increase longevity
- 25% Violence/aggression reduction
- 8% Crime reduction
- 20% Increase youth self-discipline



Community



# The Value of Biophilic Design

Increase of Property Value

+58% Waterfront

+37% Park views

+7% Forest views

+5% Water views

+5% Landscaping or park



# Development

# The Value of Biophilic Design

- Decreased stress, anxiety
- Improved mood, outlook, collaboration
- Reduced length of stay  
*-8% shorter*
- Increased effectiveness of treatment  
*-20% reduction painkillers*



# The Value of Biophilic Design

- Consumers shown to pay +25% more
- Longer duration spent in stores
- Buffers stress of shopping
- Higher frequency of repeat business



Retail

# The Value of Biophilic Design

- Increased productivity +6%
- Increased levels of creativity
- Stress reduction
- Increased staff mood and overall satisfaction
- 10% of staff absences are attributed to design with no connection to nature
- Absenteeism accounts for 4% of operating cost



Workplace

# The Value of Biophilic Design

- Decreased stress
- Improved attendance  
*3.5 days*
- Improved attention  
*ADHD symptoms reduced*
- Improved test scores  
*+15%*
- Improved self-discipline
- Improved learning  
*+20% school curricula*



Education

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# How do we design with Biophilic Design?

# THE SIX BIOPHILIC DESIGN ELEMENTS

by Stephen R. Kellert



**ENVIRONMENTAL  
FEATURES**



**NATURAL SHAPES  
AND FORMS**



**NATURAL PATTERNS  
AND PROCESSES**



**LIGHT AND SPACE**



**PLACE-BASED  
RELATIONSHIPS**



**EVOLVED HUMAN-  
NATURE  
RELATIONSHIPS**

# 1. Environmental Features

## Environmental Features

Color

Water

Air

Sunlight

Plants

Animals

Natural materials

Views and vistas

Façade greening

Geology and landscape

Habitats and ecosystems











A close-up photograph of a young child with blonde hair and blue eyes. The child is holding a large, vibrant red maple leaf in front of their face, partially obscuring it. The background is a soft-focus field of purple flowers. The overall mood is autumnal and natural.

## 2. Natural Shapes and Forms

### Natural shapes and forms

- Botanical motifs
- Tree and columnar supports
- Animal (mainly vertebrate) motifs
- Shells and spirals
- Egg, oval, and tubular forms
- Arches, vaults, domes
- Shapes resisting straight lines and right angles
- Simulation of natural features
- Biomorphy
- Geomorphology
- Biomimicry



DERLAND

CHILDREN









# 3. Light and Space

A long, tree-lined path in a park. The path is paved and runs straight through the center of the image, flanked by rows of mature trees with dense green foliage. The ground is covered in dappled sunlight and shadows from the trees. In the distance, several people are walking along the path. On the right side, a person is sitting on a wooden bench. The overall atmosphere is peaceful and shaded.

## Light and Space

Natural light  
Filtered and diffused light  
Light and shadow  
Reflected light  
Light pools  
Warm light  
Light as shape and form  
Spaciousness  
Spatial variability  
Space as shape and form  
Spatial harmony  
Inside-outside spaces

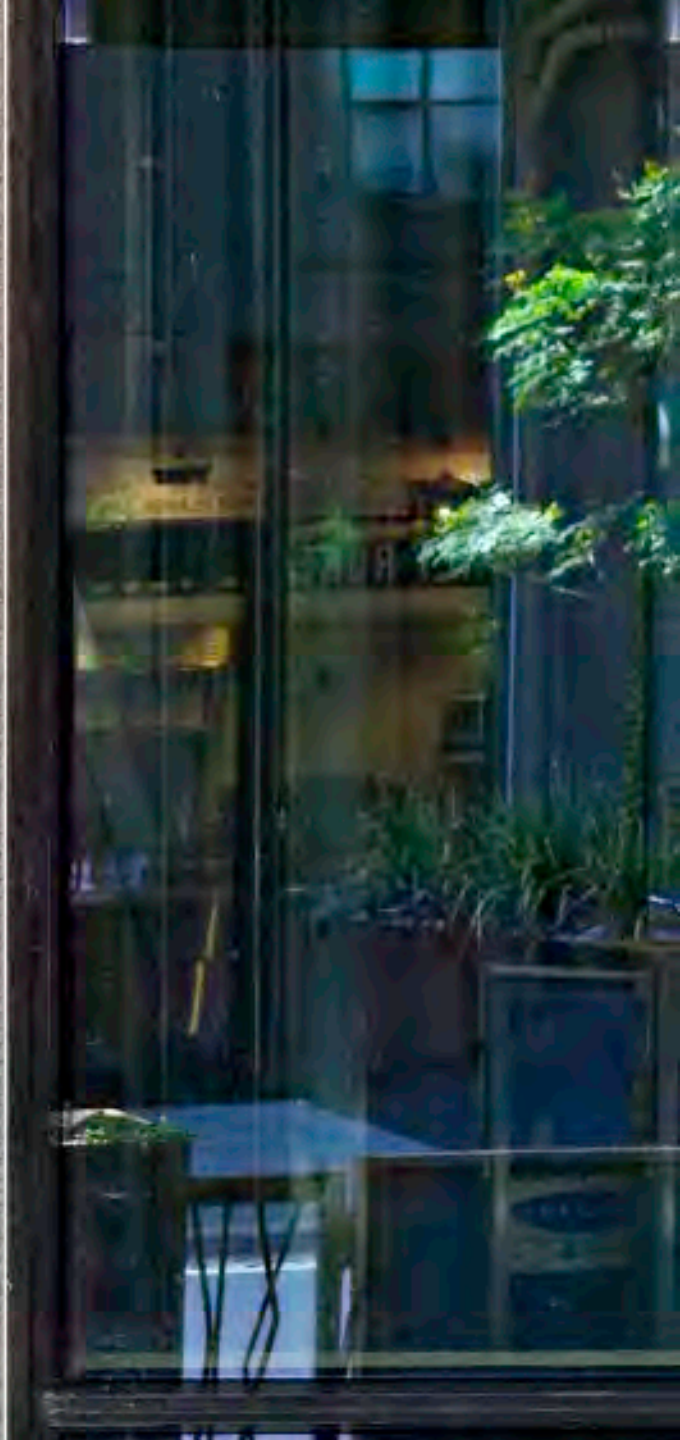
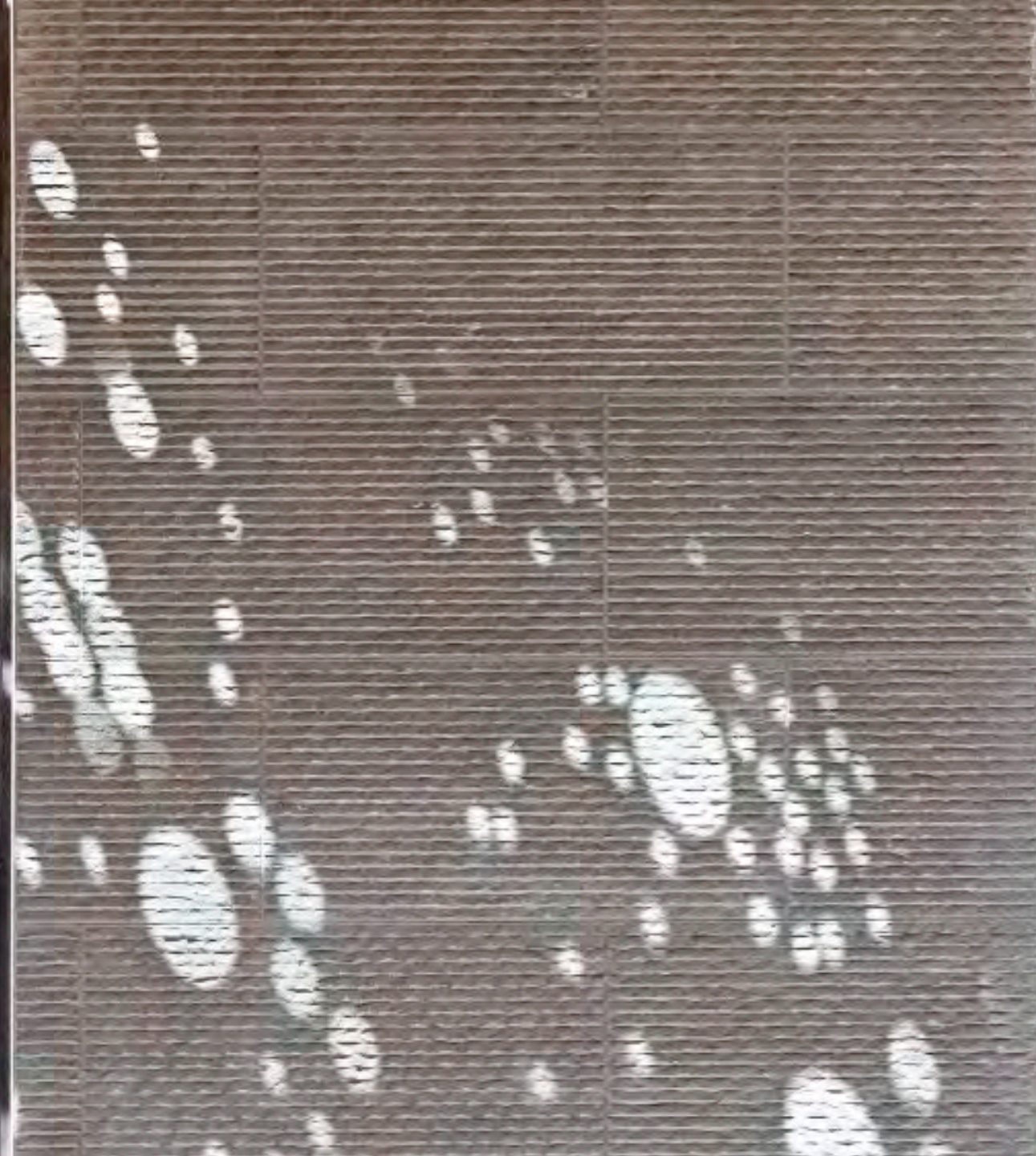




Photo Credit: ILFI, Perkins & Will



# 4. Natural patterns and processes

## Natural patterns and processes

Sensory variability

Information richness

Age, change, and the patina of time

Growth and efflorescence

Central focal point

Patterned wholes

Bounded spaces

Transitional spaces

Linked series and chains

Integration of parts to wholes

Complementary contrasts

Dynamic balance and tension

Fractals

Hierarchically organized ratios and scales



Photo Credit: ILFI, Bertschi Life Science



Photo Credit: Phipps Conservatory and Botanical Garden







# 5. Place-based Relationships

A sepia-toned photograph of a rocky landscape. In the foreground, there are large, light-colored boulders and some sparse, dry grasses. In the middle ground, a large, gnarled tree with a thick trunk and a spreading canopy of leaves stands on a rock outcrop. The background is a clear, light-colored sky.

## Place-based relationships

- Geographic connection to place
- Historic connection to place
- Ecological connection to place
- Cultural connection to place
- Indigenous materials
- Landscape orientation
- Landscape features that define building form
- Landscape ecology
- Integration of culture and ecology
- Spirit of place
- Avoiding placelessness



Photo Credit: Phipps Conservatory and Botanical Garden









## 6. Evolved human-nature relationships

### Evolved human-nature relationships

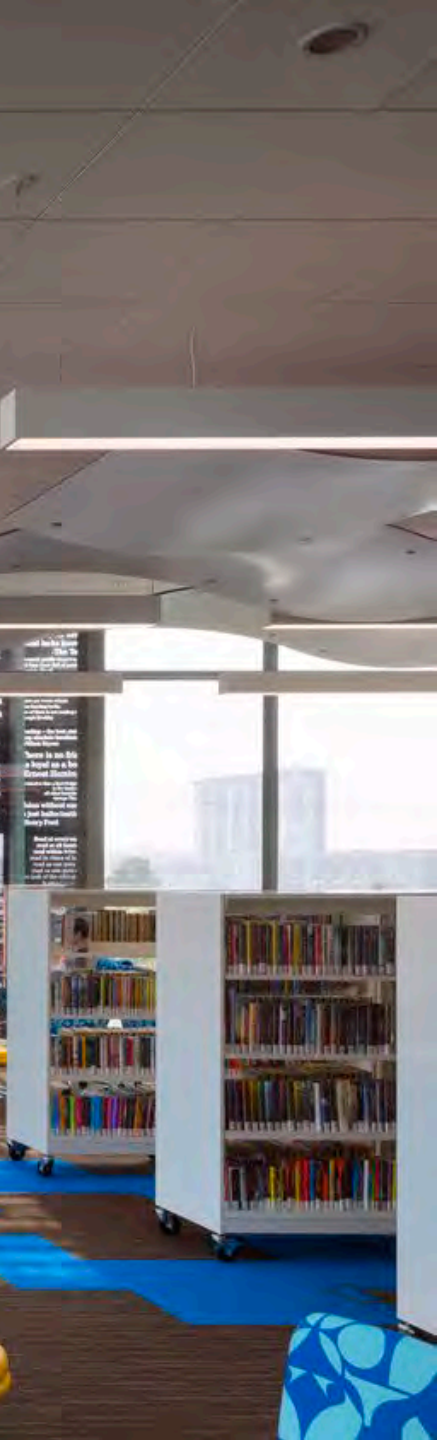
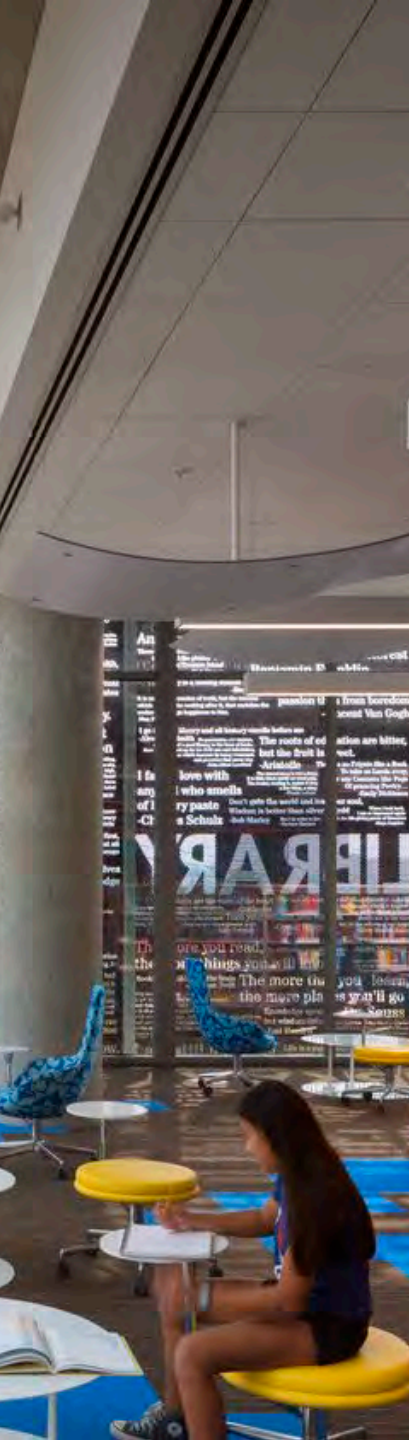
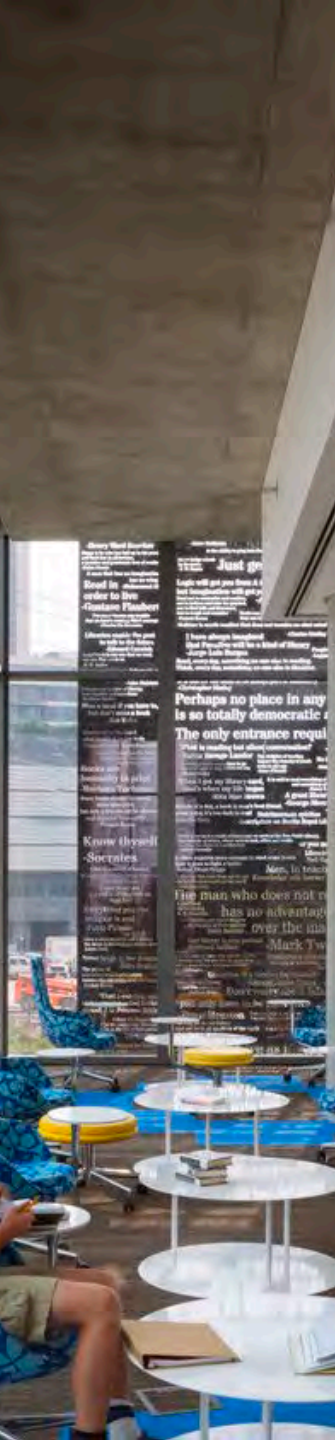
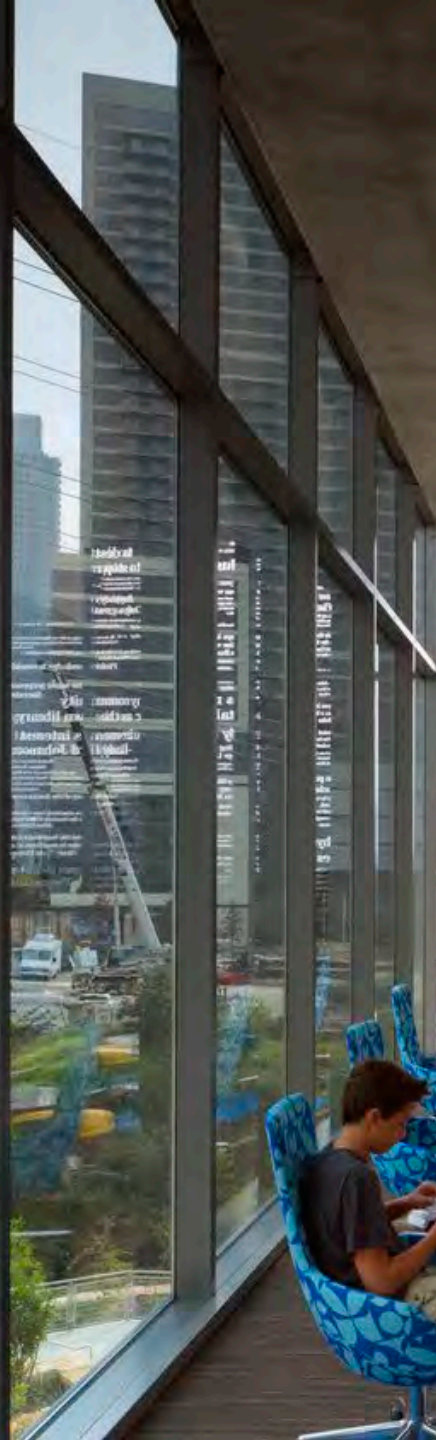
- Prospect and refuge
- Order and complexity
- Curiosity and enticement
- Change and metamorphosis
- Security and protection
- Mastery and control
- Affection and attachment
- Attraction and beauty
- Exploration and discovery
- Information and cognition
- Fear and awe
- Reverence and spirituality











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# Revealing “essence” in biophilic design

# Essence and biophilic design

- Early engagement
- Integrative and Inclusive
- Experiential
  - Mindfulness
  - Nature immersion
  - Play + storytelling
- Regenerative mindset (*support life!*)



<http://phipps.conservatory.org/design>

To carry with you...

- To deepen your connection
- Explore Biophilic Design Chapter 1  
Kellert, Heerwagon, Mahor
- Start where you are
- Learn the “Essence” of a place  
Gardens, Historians, Museums, Cultural centers, Indigenous people, Elders, native landscapes. Parks. Community. Plants, Animals, Art







Photo Credit: Nic Lehoux

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# Thank you.

*The Lost Language of Love in Architecture*

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