

european healthcare design

enriched environments

Tye Farrow

Farrow Partners  
B Arch, M Arch UD, FRAIC, OAA, MAIBC, Assoc. AIA, LEED AP  
[www.farrowpartners.ca](http://www.farrowpartners.ca)



# enriched environments



# birth, death & resurrection wellness



**can space  
cause physiological &  
psychological health?**



**bolster attention, memory,  
learning & the quality of  
social interaction?**




**activate optimal health**











Study: “Coffee cues elevate arousal and reduce level of construal”; journal *Consciousness and Cognition*.  
Eugene Y. Chana, Sam J. Maglio, University of Toronto, 2019



looking at coffee  
causes brain to be  
alert & attentive

similar chemically  
to physiological  
effect of actually  
drinking coffee

















Study: "Smell the Roses:  
Exposure to Fast Food Impedes Happiness."  
Julian House, Sanford E. DeVoe, Chen-Bo Zhong  
University of Toronto, 2013





symbols of  
impatience culture  
undermines ability to:

- experience happiness
- produces negative consequences for how experience pleasurable events



psychological effect  
called priming

subtle exposure to clues  
influences our  
subconscious thought  
how we think & react  
to what we see







**why is this relevant?**



**. . . to what  
& how we build?**



# environmental health



# environmental health



# physical health



physical health



# Introduction to LEED

LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. Prerequisites and credits differ for each rating system, and teams choose the best fit for their project.

## 5 Rating systems

### BD+C

**DESIGN + CONSTRUCTION**  
 LEED Green Building  
 New Construction  
 Core & Shell  
 Schools  
 Retail  
 Healthcare  
 Data Centers  
 Hospitality  
 Warehouses & Distribution

### ID+C

**INTERIOR DESIGN + CONSTRUCTION**  
 Commercial Interiors  
 Retail  
 Hospitality

### O+M

**OPERATION + MAINTENANCE**  
 Existing Buildings  
 Data Centers  
 Warehouses & Distribution  
 Hospitality  
 Schools  
 Retail

### ND

**NEIGHBORHOOD DEVELOPMENT**  
 New Land Development  
 Land Development  
 Residential  
 Mixed Use  
 Commercial  
 Industrial

### HOMES

**HOUSING**  
 LEED Green Building  
 Single Homes  
 Low Rise Multi-Unit  
 Mid Rise Multi-Unit

## Credit Categories

Each rating system is made up of a combination of credit categories.

Within each of the credit categories, there are specific prerequisites projects must satisfy and a variety of credits projects can pursue to earn points. The number of points the project earns determines its level of LEED certification.



**INTEGRATIVE PROCESS**  
 Encouraging cross-discipline collaboration



**LOCATION & TRANSPORTATION**  
 Access to variety of transport and/or credit for constrained sites



**MATERIALS & RESOURCES**  
 Using sustainable materials & reducing waste



**WATER EFFICIENCY**  
 Smart use and reuse of water



**ENERGY & ATMOSPHERE**  
 Energy Performance



**SUSTAINABLE SITES**  
 Minimising impact on ecosystems & water resources



**INDOOR ENVIRONMENT**  
 Indoor air quality & access to natural light & views



**INNOVATION**



**REGIONAL PRIORITY**  
 Geographic environmental priorities



LEED is administered by the US Green Building Council. For information on the scheme go to [www.usgbc.com](http://www.usgbc.com)

## The Ratings





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## 5 Rating systems

BD+C	ID+C	O+M	ND	HOMES
<p><b>DESIGN + CONSTRUCTION</b></p> <p>Commercial Buildings Retail Schools Homes</p>	<p><b>DESIGN + CONSTRUCTION</b></p> <p>Commercial Interiors Retail Residential</p>	<p><b>OPERATION &amp; MAINTENANCE</b></p> <p>Existing Buildings Data Centers Warehouses &amp; Distribution Manufacturing Schools</p>	<p><b>NEIGHBORHOOD DEVELOPMENT</b></p> <p>New Land Development Land Development Residential Street Use Community</p>	<p><b>HOUSING</b></p> <p>Single Homes Low-Rise Multi-Unit Mid-Rise Multi-Unit</p>

## LEED Building Certification Living Building Challenge Fitwel Rating System

## Credit Categories

Within each of the credit categories, there are specific prerequisites projects must satisfy and a variety of credits projects can pursue to earn points. The number of points the project earns determines its level of LEED certification.

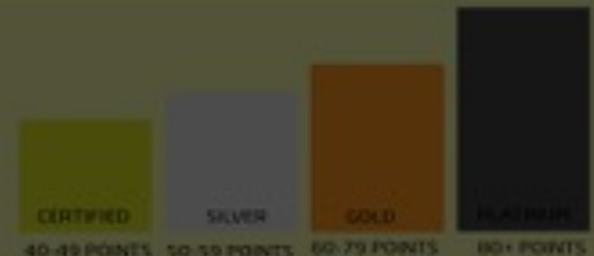
<b>INTEGRATIVE PROCESS</b> Encouraging cross-discipline collaboration	<b>LOCATION &amp; TRANSPORTATION</b> Access to variety of transport and/or credit for constrained sites	<b>WATER EFFICIENCY</b> Water conservation	<b>ENERGY &amp; ATMOSPHERE</b> Energy conservation	<b>SUSTAINABLE SITES</b> Site selection	<b>GREEN BUILDING</b> Material selection	<b>INNOVATION</b> Leadership in design	<b>REGIONAL PRIORITY</b> Geographic environmental priorities

## Delos WELL Building Standard NYC Active Design Guidelines



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## The Ratings



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## 5 Rating systems

BD+C	ID+C	O+M	ND	HOMES
<p><b>DESIGN + CONSTRUCTION</b></p> <p>Commercial Office Retail School Hotel Healthcare Data Center Residential Warehouses &amp; Distribution</p>	<p><b>DESIGN + CONSTRUCTION</b></p> <p>Commercial Office Retail Residential</p>	<p><b>OPERATION + MAINTENANCE</b></p> <p>Existing Buildings Data Center Warehouses &amp; Distribution Hospitality School Retail</p>	<p><b>NEIGHBORHOOD DEVELOPMENT</b></p> <p>New Land Development Land Development Residential Mixed Use Commercial Industrial</p>	<p><b>RESIDENTIAL BUILT FOR RENT</b></p> <p>Single Homes Low Rise Multi-Unit Mid Rise Multi-Unit</p>

## Credit Categories

Each rating system is made up of a combination of credit categories. Within each of the credit categories, there are specific prerequisites projects must satisfy and a variety of credits projects can pursue to earn points. The number of points the project earns determines its level of LEED certification.

# standard of care

<p><b>INTEGRATIVE PROCESS</b> Encouraging cross-discipline collaboration</p>	<p><b>LOCATION &amp; TRANSPORTATION</b> Access to variety of transport and/or credit for constrained sites</p>	<p><b>MATERIALS &amp; RESOURCES</b> Using sustainable materials &amp; reducing waste</p>	<p><b>WATER EFFICIENCY</b> Smart use and reuse of water</p>	<p><b>ENERGY &amp; ATMOSPHERE</b> Energy Performance</p>	<p><b>SUSTAINABLE SITES</b> Minimizing impact on ecosystems &amp; water resources</p>	<p><b>INDOOR ENVIRONMENT</b> Indoor air quality &amp; access to natural light &amp; views</p>	<p><b>INNOVATION</b></p>	<p><b>REGIONAL PRIORITY</b> Geographic environmental priorities</p>
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## The Ratings











hardware



operating system









**mind health**

A glowing blue wireframe brain with neural connections, set against a black background. The brain is rendered in a semi-transparent, glowing blue color, showing the intricate network of neural pathways and the overall structure of the brain. The text "neuroscience + architecture" is overlaid in white, bold, sans-serif font across the center of the brain.

**neuroscience + architecture**









**cognitive ↔ pre-cognitive**



physiological ↔ psychological



thrive



**bolster attention, memory,  
learning & the quality of  
social interaction**





A wide-angle photograph of a large, mostly empty parking lot. The foreground shows several empty parking spaces marked with white lines on asphalt. In the middle ground, there are several cars parked in a row. The background features a mix of urban buildings, including a prominent brick building with a circular logo and a sign that says "24/7". To the right, there are several tall, multi-story apartment buildings. The sky is overcast with grey clouds. The text "space isn't neutral" is overlaid in large white letters across the center of the image.

space isn't neutral







causes health









**erodes health**



## Context

Wellness: holistic view of what causes health






**Pathogenic**

**Wellness**



Disease care




Holistic health

**Reacting**


**Causing**



  
Preventative

  
Proactive

  
Predictive

  
Activating

## 3,000 BC Traditional Chinese Medicine



TCM applies a holistic perspective to achieving health & wellbeing, by cultivating harmony in one's life





## 500 BC Ancient Greek - Hippocrates



Focus on preventing sickness vs treating disease  
diet, lifestyle & environmental



## 50 BC Ancient Roman Medicine



Preventing spread of disease  
public health: aqueducts, sewers & public baths



## 1600 – 1800's Wellness Concept Established



### 'State of well-being'

rise of homeopathy, hydrotherapy, herbalism,  
exercise, nutrition, balanced fruit/veg diets,  
osteopathy, chiropractic,  
naturopathy - body self-healing, message therapy,  
detoxification  
spiritual arthrosophical medicine





## 1854 London England Cholera Epidemic



John Snow English physician who discovered medical hygiene - connected the dots between the handle of a water well & spread of the disease of those that used it



## 1870 Germ Theory Established



Louis Pasteur discovery  
foundations of 'modern' western medicine



## 1910 Carnegie Foundation Flexner Report



Critique of North American medical education  
questioned all forms of medicine other than  
bio-medical  
sets stage for disease oriented evidenced based  
medicine all other forms of medical education  
ostracized





## 1940's Rise of Chronic Disease



Reduced daily physical exertion  
Marketing of tobacco  
Changing food quality  
Car-centric suburbs  
'Common source epidemic'



## 1960-70's Birth of Wellness Movement



1960-Halbert L Dunn: "High-level Wellness"  
1970's: Travis, Ardell, Hettler: comprehensive  
wellness assessment tools, wellness centres &  
National Wellness Institute



## 1971 Antonovsky Identifies 'Origins of Health'



**Salutogenesis** - salus-health, genesis-origins

**Sense of coherence**

comprehensibility can understand events in your life & can anticipate future

**Manageability**

have the skills, support to take care of things; a sense of control

**Meaningfulness**

things are interesting, satisfying & a reason & purpose

**Sense of purpose** - most important determinant of health outcomes



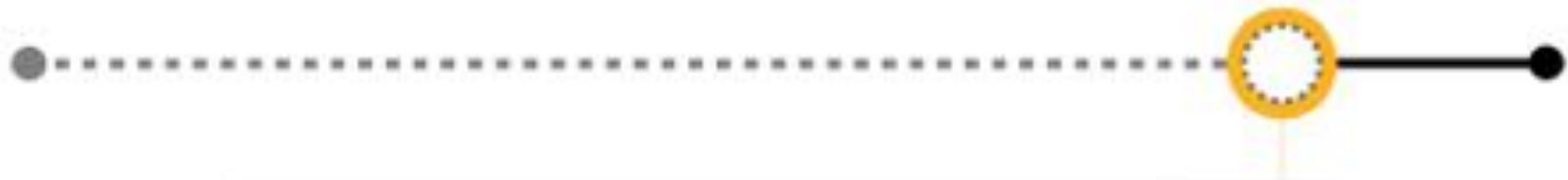
## 1980-2014 Wellness Goes Mainstream



'wellness' enters the collective psyche & vocabulary  
workplace wellness programs (\$40 bn industry-9% 3 bn wf)  
fitness/spa, healthy diet, living, travel industries rapid growth  
chronic disease crisis - unsustainable healthcare costs  
diminishing healthcare workforce  
governments shift focus to screening & prevention strategies  
Harvard, Yale & Mayo Med Cntrs' shift to 'Integrative Medicine'



## 2014 – 2017 Growth of Global Wellness Economy



2014 first Global Wellness Economy Monitor report  
measures size of global wellness economy  
industries enabling wellness activities & lifestyles into daily life  
2015 global healthcare expenditures \$7.3 trn  
2015 wellness economy \$3.7 trn  
2017 wellness economy \$4.2 trn - 6.4% growth annually  
5.3% of global economic output  
annually growth rate 2x global economic growth of 3.6%

Global Wellness Institute



## 2018 Health Acceleration



causing health by accelerating the physiological & psychological conditions of optimal health



accelerate  
optimal health?



how can space  
accelerate  
optimal health?



**architecture**

is like

**food**

architecture  
is like  
food



Manners Maketh M

This above all: to thine own self

I am the master of my fate; I am the captain

Next to trying and winning, the best thing

The best portion of a good man's life; his little, namely

**enrich  
mind, body  
& soul**

**starve them**



**...full of 'empty calories'  
that cause chronic disease,  
depression & boredom**









food conscious:

**where it's from  
how it made  
how it nourishes**





# 'super foods' eclipse all others

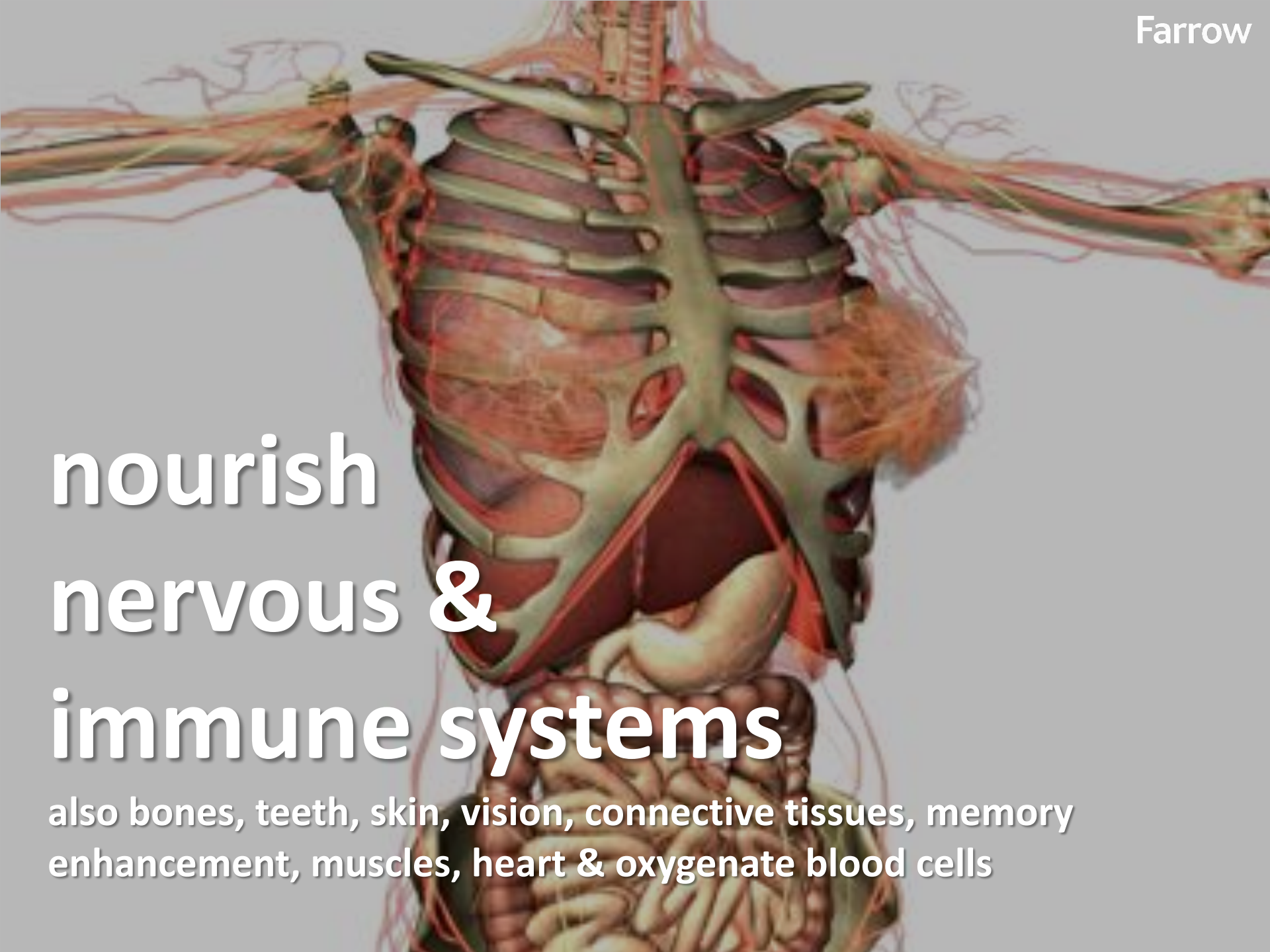




**packed with  
minerals & vitamins**

A, B, C, D & minerals; iron, calcium & magnesium





nourish  
nervous &  
immune systems

also bones, teeth, skin, vision, connective tissues, memory enhancement, muscles, heart & oxygenate blood cells

**Neuroscientists:  
environment alters  
& enhances our capacity for thought**

**creating, concentrating  
& social engagement**

... heighten  
... or suppresses  
**emotions & behaviour**



**enriched environments:  
architectural  
'super vitamins'**



**. . . intrinsic components  
that simulate brains'  
biological & chemical  
operating systems**

improves health  
measured through  
**neurological, physiological, psychological  
& sociological feedback**





## Nature

### The Role of Nature-Based Experiences in the Development and Maintenance of Wellness

Author(s): Dr. Eric Brymer, Thomas F. Cuddihy & Vinathe Sharma-Bryer  
<https://www.tandfonline.com/doi/abs/10.1080/18377122.2010.9730328>  
 "In this paper the authors show how an individual's experience of wellness is strongly connected to their relationship with the natural world."

### Outdoor Recreation, Health, and Wellness: Understanding and Enhancing the Relationship

Author(s): Geoffrey Godbey  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1408694](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1408694)  
 "The paper describes approaches to measuring physical activity and recent trends in park visitation and outdoor activity participation. It looks at variables that affect participation in outdoor activities and considers the projected demographic changes that will affect policy making in this arena."

### Nature and Health

Author(s): Terry Hartig, Richard Mitchell, Sjerp de Vries & Howard Frumkin  
<https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-032013-182443>

### Why is Nature Beneficial?: The Role of Connectedness to Nature

Author(s): F. Stephan Mayer, Cynthia McPherson Frantz, Emma Bruehlman-Senechal & Kyffin Dolliver  
<https://journals.sagepub.com/doi/abs/10.1177/0013916508319745>  
 "The discussion focuses on the mechanisms that underlie the exposure to nature/well-being effects."

### The impacts of nature experience on human cognitive function and mental health

Author(s): Gregory N. Bratman, J. Paul Hamilton & Gretchen C. Daily  
<https://nyaspubs.onlinelibrary.wiley.com/doi/abs/10.1111/j.1749-6632.2011.06400.x>  
 How natural environments impact human well-being. How nature "effects human cognitive function and mental health, synthesizing work from environmental psychology, urban planning, the medical literature, and landscape aesthetics."

### Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for populations

Author(s): Cecily Maller, Mardie Townsend, Anita Pryor, Peter Brown & Lawrence St. Leger  
<https://academic.oup.com/heapro/article/21/1/45/646436>  
 "This paper presents a summary of empirical, theoretical and anecdotal evidence drawn from a literature review of the human health benefits of contact with nature."

### Healing gardens - places for nature in health care

Author(s): Dr. Terry Hartig  
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(06\)69920-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(06)69920-0/fulltext)  
 "Evaluations indicate that these gardens improve quality of life for patients, afford an opportunity for them to exercise without becoming agitated, and lighten the burden of care for nurses."

### Views to nature: Effects on attention

Author(s): Carolyn M. Tennessen & Bernard Cimplich  
<https://www.sciencedirect.com/science/article/abs/pii/0272494495900160>  
 "The purpose of this study was to explore whether university dormitory residents with more natural views from their windows would score better than those with less natural views on tests of directed attention."

### Gardening as a mental health intervention: a review

Author(s): Jane Clatworthy, Joe Hinds & Paul M. Camic  
<https://www.emeraldinsight.com/doi/abs/10.1108/MHRJ-02-2013-0007>  
 "The purpose of this paper is to evaluate the current evidence-base for gardening-based mental health interventions and projects through examining their reported benefits and the quality of research in this field."

### Nature-Based Counseling: Integrating the Healing Benefits of Nature Into Practice

Author(s): Arie T. Greenleaf, Rhonda M. Bryant & Joanna B. Pollock  
<https://link.springer.com/article/10.1007/s10447-013-9198-4>  
 "Research establishes a strong link between contact with nature and enhanced human wellness. Given the potential benefits of nature experiences on enhancing mental health, the authors advocate for a greater inclusion of nature-based approaches into professional practice. A case example and implications for practice are presented."

### What is the Best Dose of Nature and Green Exercise for Improving Mental Health?

Author(s): Jo Barton & Jules Pretty  
<https://pubs.acs.org/doi/abs/10.1021/es903187>  
 "This multistudy analysis assessed the best regime of dose(s) of acute exposure to green exercise required to improve self-esteem and mood."

### People and green spaces: promoting public health and mental well-being through ecotherapy

Author(s): Ambr Burls  
<https://www.emeraldinsight.com/doi/abs/10.1108/17465729200700018>  
 "This paper debates how the use of ecotherapeutic approaches can provide a two-pronged system to achieve both individual health (at micro level) and public and environment health outcomes (at macro level)."

### Beyond Toxicity: Human health and the natural environment

Author(s): Howard Frumkin  
[https://www.ajpmonline.org/article/S0749-3797\(00\)00317-2/fulltext](https://www.ajpmonline.org/article/S0749-3797(00)00317-2/fulltext)  
 "Forest Bathing is part of a global effort to tend to the stressful conditions of living in modern industrialized civilization."

### Effect of forest bathing trips on human immune function

Author(s): Qing Li  
<https://environhealthpremed.biomedcentral.com/articles/10.1007/s12199-008-0068-3>  
 "This review focuses on the effects of forest bathing trips on human immune function."

### "Saturday Forest Bathing"

[https://my.arboretum.harvard.edu/Info.aspx?DayPlanner=1862&DayPlannerDate=5/25/2019&utm\\_source=SilverpopMailing&utm\\_medium=email&utm\\_campaign=Daily%20Gazette%2020190524%20\(1\)](https://my.arboretum.harvard.edu/Info.aspx?DayPlanner=1862&DayPlannerDate=5/25/2019&utm_source=SilverpopMailing&utm_medium=email&utm_campaign=Daily%20Gazette%2020190524%20(1))

### Neighborhoods with more green space may mean less heart disease

Author(s): American Heart Association  
<https://www.sciencedaily.com/releases/2018/12/181205093718.htm>  
 "In this study...researchers from the University of Louisville investigated the impact of neighborhood green spaces on individual-level markers of stress and cardiovascular disease risk."

### Variety:

#### Space, place and atmosphere. Emotion and peripheral perception in architectural experience

Author(s): Juhani Pallasmaa  
<https://riviste.unimi.it/index.php/Lebenswelt/article/view/4202>  
 "The judgement of environmental character of a space or place calls for categories of sensing that extend beyond the five Aristotelian senses, such as the embodied existential sense, and, as a result, the entity is perceived in a diffuse, peripheral and unconscious manner."

#### How Architecture Uses Space, Light and Material to Affect Your Mood

Author(s): Kashmiri Gander  
<https://www.independent.co.uk/life-style/design/how-architecture-uses-space-light-and-material-to-affect-your-mood-american-institute-architects-a6985986.html>  
 "Numerous studies show that buildings can impact a person's health, and as citizens of modern societies spend 90 percent of their time indoors, this is more important than ever."

### Vitality:

#### Sensory Stimulation in Dementia Care: Why It Is Important and How to Implement It

Author(s): Stephen Vozzella  
[https://journals.lww.com/topicingeriatricrehabilitation/Abstract/2007/04000/Sensory\\_Stimulation\\_in\\_Dementia\\_Care\\_\\_Why\\_It\\_Is\\_2.aspx](https://journals.lww.com/topicingeriatricrehabilitation/Abstract/2007/04000/Sensory_Stimulation_in_Dementia_Care__Why_It_Is_2.aspx)  
 "This article will review the meaning of sensory stimulation, for whom it is appropriate, and the benefits. The activity assessment is integral in determining activities that are successful in stimulating the senses."

#### Building For All The Senses: Bringing Space to Life

Author(s): Maria Lorena Lehman  
<https://marialorenalehman.com/post/architectural-building-for-all-the-senses>  
 "As the human body moves, sees, smells, touches, hears and even tastes within a space - the architecture comes to life."

#### Considering the Five Senses in Architecture

Author(s): Arezou Zaread  
<https://www.cwejournal.org/vol11noSpecial/considering-the-five-senses-in-architecture/>  
 "This paper discusses the perception of senses in architecture, explaining how they work and influence on each other and the differences between them."

### Authenticity:

#### Colour research with architectural relevance: How can different approaches gain from each other?

Author(s): Karin Fridell Anter & Monica Billger  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/col.20565>

### Sense of Occurrence:

#### Experts Explore the Impact of Architecture and Design on the Brain

Author(s): Stephen Waldron  
<https://www.aas.org/news/experts-explore-impact-architecture-and-design-brain>  
 "Studies have reported that exposure to daylight can have a positive impact on workplace performance by improving sleep quality among employees, making them more focused and alert at work."

### Optimism:

#### Effects of Interior Design on Wellness: Theory and Recent Scientific Research

Author(s): Roger S. Ulrich  
[https://www.researchgate.net/profile/Roger\\_Ulrich4/publication/273354344\\_Effects\\_of\\_Healthcare\\_Environmental\\_Design\\_on\\_Medical\\_Outcomes/links/](https://www.researchgate.net/profile/Roger_Ulrich4/publication/273354344_Effects_of_Healthcare_Environmental_Design_on_Medical_Outcomes/links/)  
 "By focusing on the concept of stress, a theory of supportive design can be developed that conceptualizes human impacts of design in ways that are related directly to scientifically credible indicators or interpretations of wellness."

### Legacy:

#### A new perspective on how humans assess their surroundings; derivation of head orientation and its role in 'framing' the environment

Author(s): Gwendoline Ixia Wilson, Mark D. Holton, James Walker, Mark W. Jones, Ed Grundy, Ian M. Davies, David Clarke, Adrian Luckman, Nick Russell, Vianney Wilson, Rosie Plummer & Rory P. Wilson  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC447616/>

### BOOKS:

#### Information Visualization: Perception for Design

Author(s): Colin Ware  
[https://books.google.ca/books?hl=en&lr=&id=UpYCS56snnAC&oi=fnd&pg=PP1&dq=human+perception+and+d+design&ots=33Az7mZEig&sig=r1YrhN1\\_0Kq98oa1W1kXGtZkU#v=onepage&q=human%20perception%20and%20design&f=false](https://books.google.ca/books?hl=en&lr=&id=UpYCS56snnAC&oi=fnd&pg=PP1&dq=human+perception+and+d+design&ots=33Az7mZEig&sig=r1YrhN1_0Kq98oa1W1kXGtZkU#v=onepage&q=human%20perception%20and%20design&f=false)  
**ntentions in Architecture**  
 Author(s): Christian Norberg-Schulz  
<https://books.google.ca/books?hl=en&lr=&id=c-M9IMgQPIC&oi=fnd&pg=PA7&dq=how+do+we+perceive+architecture&ots=R5SpzHwiq&sig=r4lPiOkIO592c7mwsy3kWa3a9RQ#v=onepage&q=how%20do%20we%20perceive%20architecture&f=false>

### ARTICLES:

#### What cognitive science taught me about design

Author(s): Mel DeStefano  
<https://www.invisionapp.com/inside-design/cognitive-science-design/>  
 "Perception is the process of recognizing and interpreting sensory stimuli."

#### The Psychological Impact of Architectural Design

Author(s): Natali Ricci  
[https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=2850&context=cmc\\_theses](https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=2850&context=cmc_theses)  
 "This thesis endeavors to create an understanding of how that complex relationship evolved and how it works in today's world."

#### Space and Human Perception

Author(s): Avishag Shemesh, Mosher Bar & Yasha Jacob Grobman  
<https://faculty.biu.ac.il/~barlab/papers/2015%20Shemesh.pdf>  
 "This paper presents initial results from an ongoing research that examines the connection between human feelings and architectural space."

#### We mustn't forget the emotional impact of the buildings around us

Author(s): Daniel Libeskind  
<https://www.cnn.com/style/article/daniel-libeskind-architecture-emotions/index.html>

#### Human Cognition and its effect on design \*not written well but interesting\*

Author(s): Tushar Hudkar  
<https://medium.com/muz.li/human-cognition-and-its-effect-on-design-ed23cfff7f18>





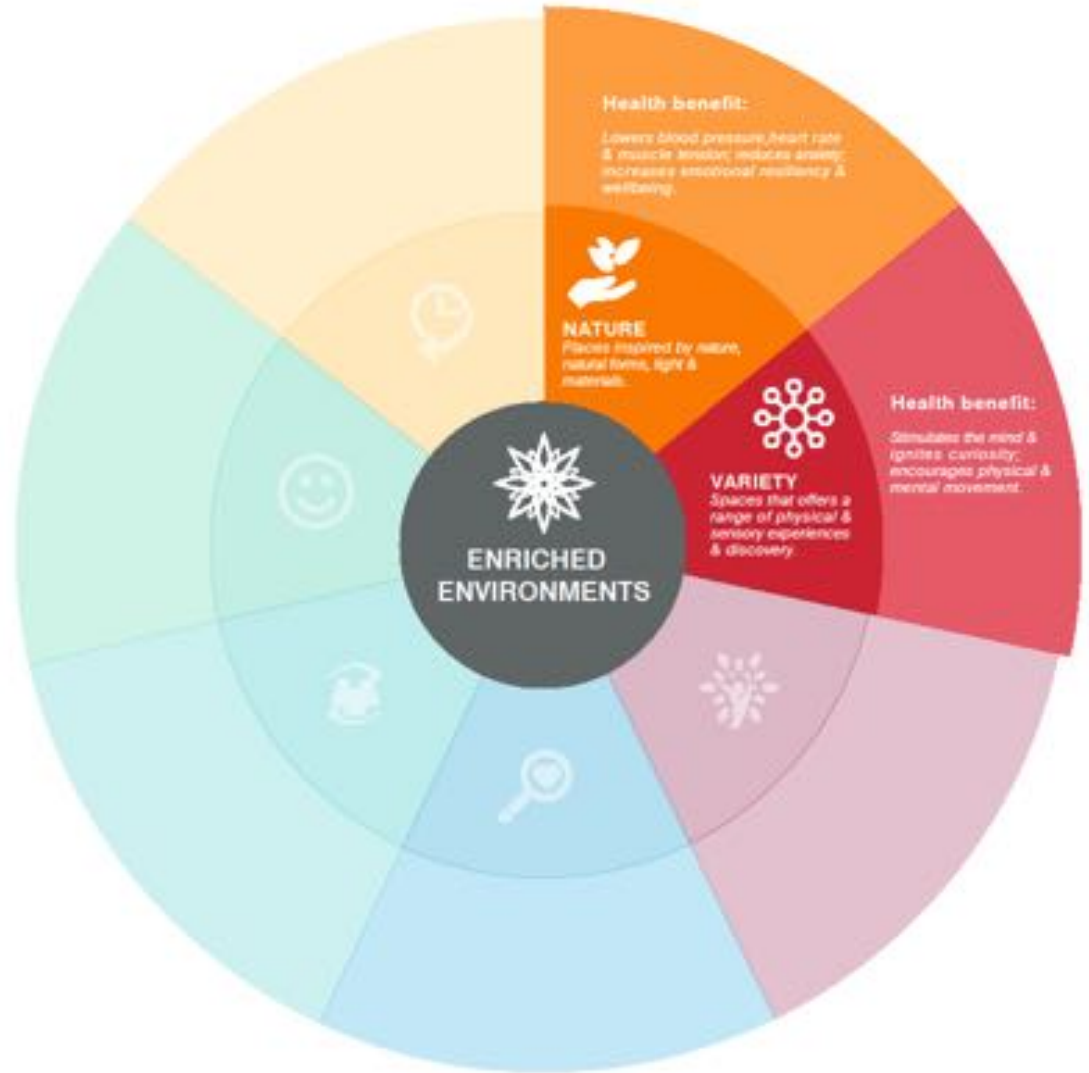
# common elements



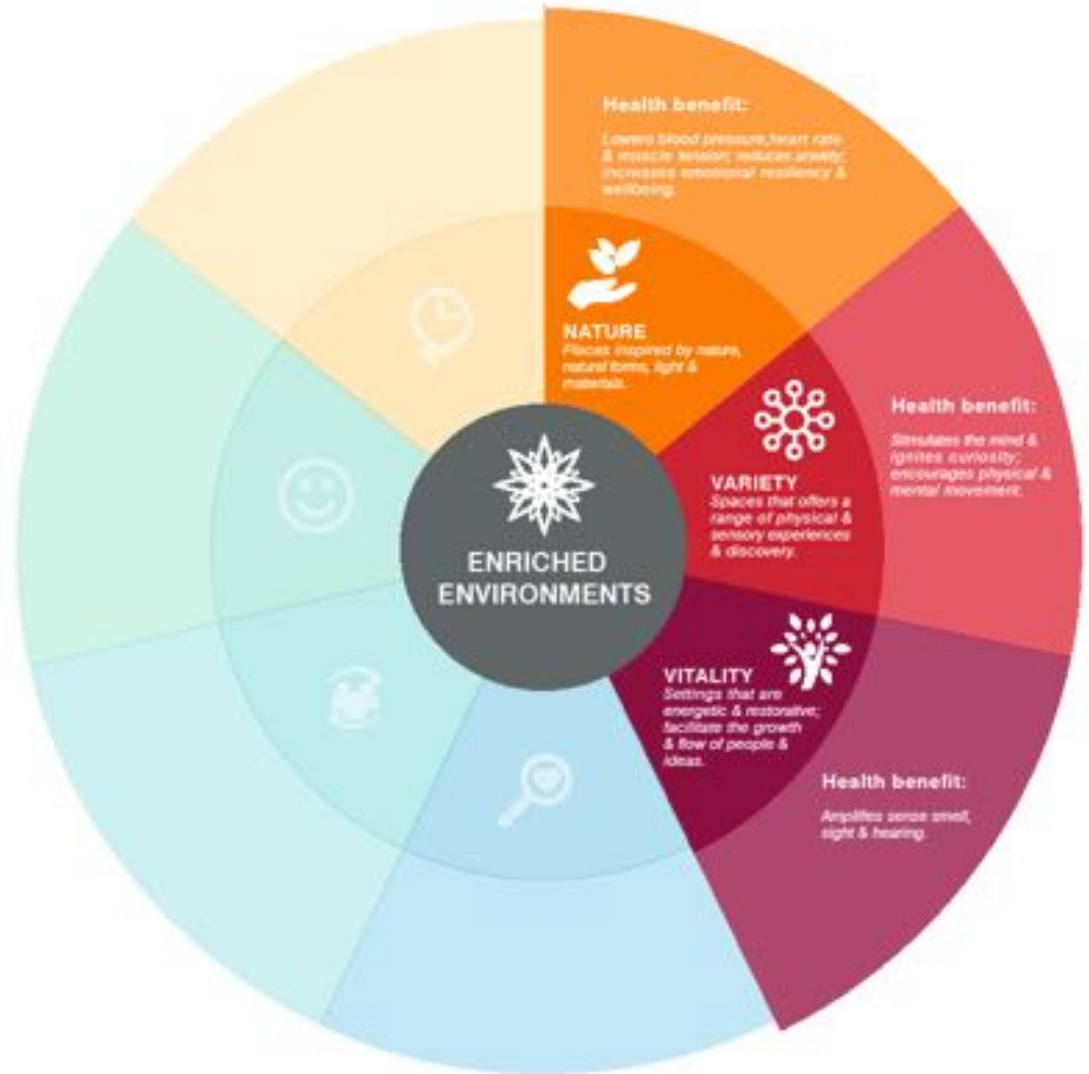
# nature



# nature variety



nature  
variety  
vitality





nature  
variety  
vitality  
authenticity



nature  
variety  
vitality  
authenticity  
sense of  
occurrence



nature  
variety  
vitality  
authenticity  
sense of  
occurrence  
optimism



nature  
 variety  
 vitality  
 authenticity  
 sense of  
 occurrence  
 optimism  
 legacy





nature  
variety  
vitality  
authenticity  
sense of  
occurrence  
optimism  
legacy









**nature**



A black and white photograph of a large, spreading tree in a field. The tree has a thick trunk and a wide, rounded canopy of leaves. It is positioned in the center-right of the frame. The background shows a flat, open landscape with a line of trees in the distance under a bright sky.

**nature**

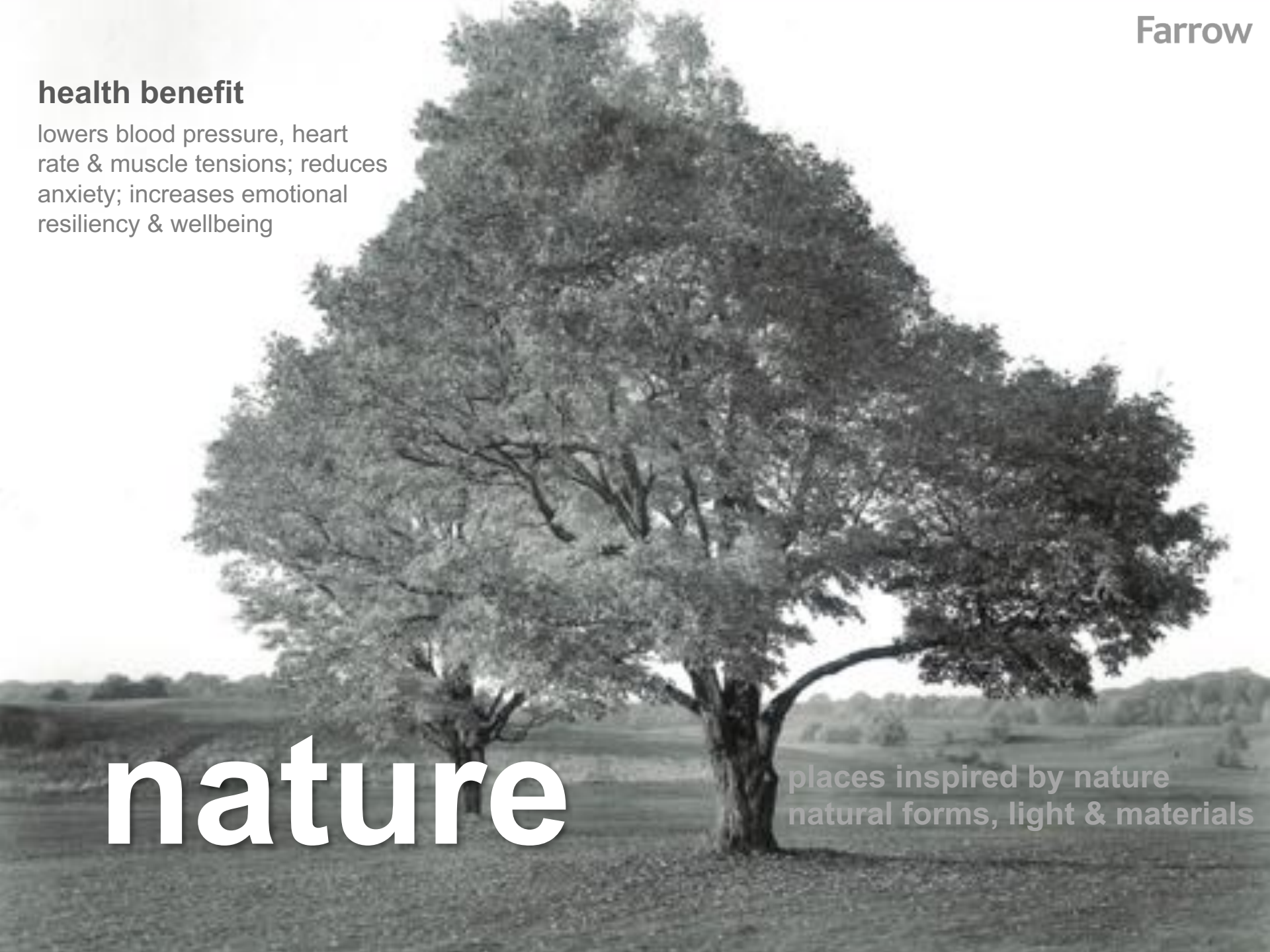
places inspired by nature  
natural forms, light & materials

**health benefit**

lowers blood pressure, heart rate & muscle tensions; reduces anxiety; increases emotional resiliency & wellbeing

**nature**

places inspired by nature  
natural forms, light & materials







Credit Valley Hospital, Farrow Partners







Credit Valley Hospital, Farrow Partners

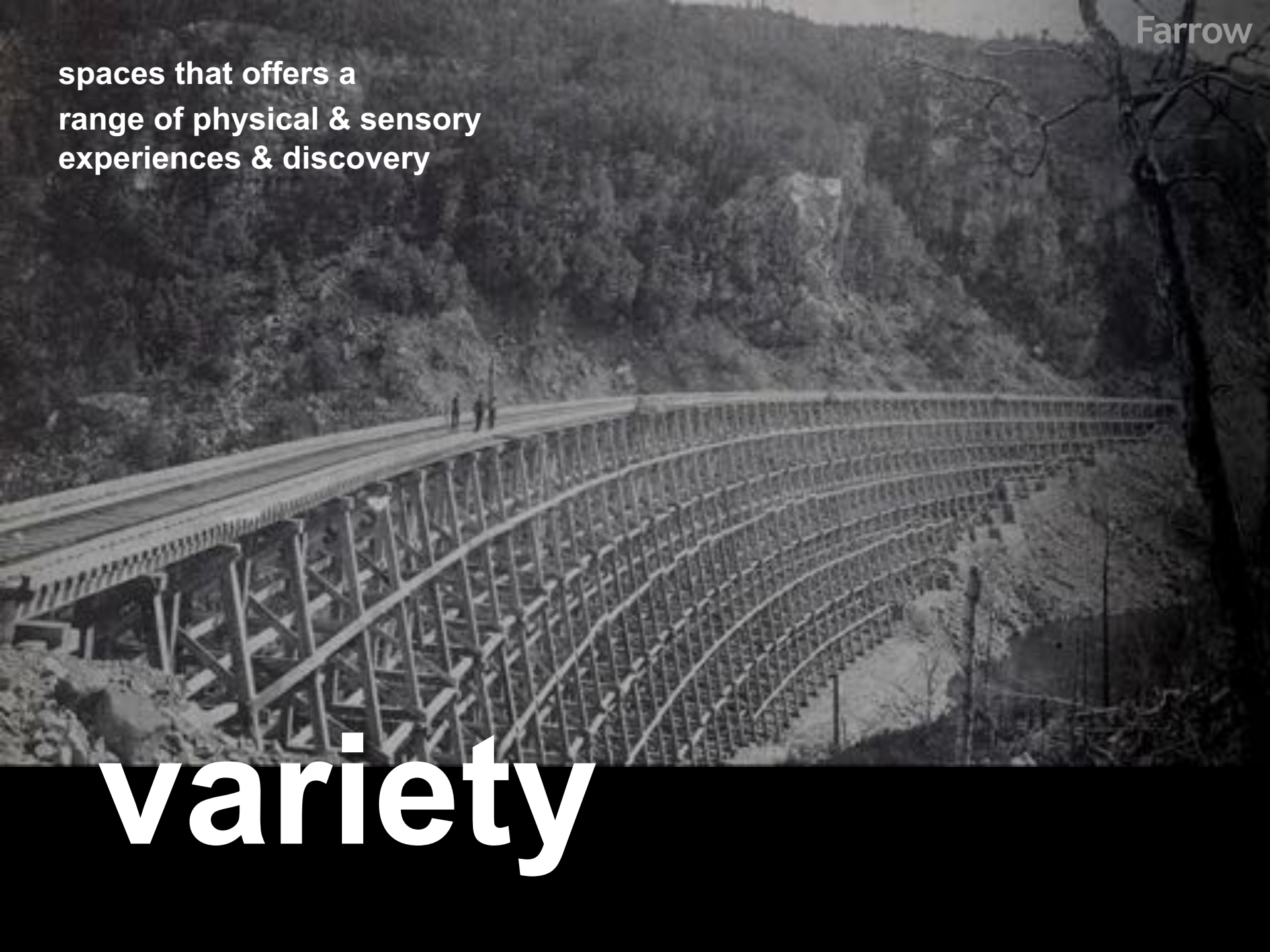




**variety**



spaces that offers a  
range of physical & sensory  
experiences & discovery



**variety**

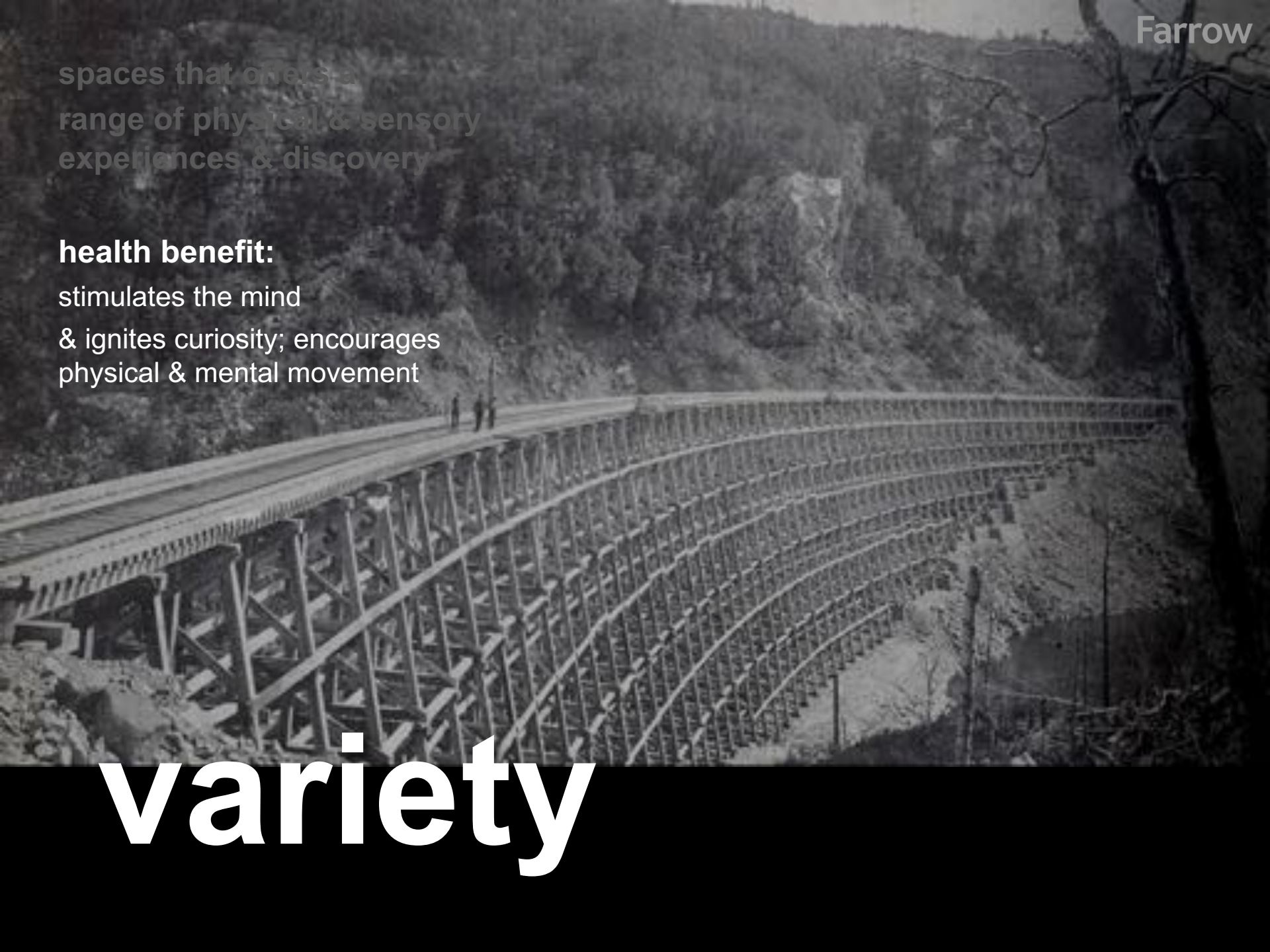


spaces that offers a  
range of physical & sensory  
experiences & discovery

**health benefit:**

stimulates the mind  
& ignites curiosity; encourages  
physical & mental movement

**variety**





Thunder Bay Health Sciences Centre, Farrow Partners & Salter Pilon





Thunder Bay Health Sciences Centre, Farrow Partners & Salter Pilon





Thunder Bay Health Sciences Centre, Farrow Partners & Salter Pilon





Thunder Bay Health Sciences Centre, Farrow Partners & Salter Pilon





**vitality**



**settings that are energetic  
& restorative; facilitate the  
growth & flow of people  
& ideas**

**vitality**



**health benefit:**  
amplifies senses, smell,  
sight & hearing

**vitality**

A photograph of a modern architectural structure, likely a public space or transit station. The structure features a large, curved, translucent canopy supported by several wooden poles. The canopy is illuminated from within, creating a warm glow. In the foreground, two people are walking away from the camera on the right. The background shows a building with large windows and some trees. The overall scene is bright and clear, suggesting a sunny day.



Kaplan Medical Centre, Farrow Partners & Avi Gordon Architects













**authenticity**



places that are valued  
for their realness &  
rootedness



authenticity

Places that are valued  
for their realness &  
rootedness

**health benefit:**

creates deep-felt emotions;  
organic connectivity & community

**authenticity**



Sechelt Medical Centre, Farrow Partners & Perkins Will







Sechelt Medical Centre, Farrow Partners & Perkins Will





Farrow

Sechelt Medical Centre, Farrow Partners & Perkins Will





**sense of occurrence**





venues where you feel  
part of a happening  
& are engaged with  
a larger community

**sense of occurrence**





venues where you feel  
part of a happening  
& are engaged with  
a larger community

**health benefit:**  
stimulates brain neuron  
cells, enhancing cognitive  
functions & reduce anxiety

# sense of occurrence







Shaare Zedek Medical Centre, Farrow Partners & RO Architects





Shaare Zedek Medical Centre, Farrow Partners & RO Architects





Shaare Zedek Medical Centre, Farrow Partners & RO Architects



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Shaare Zedek Medical Centre, Farrow Partners & RO Architects





**optimism**



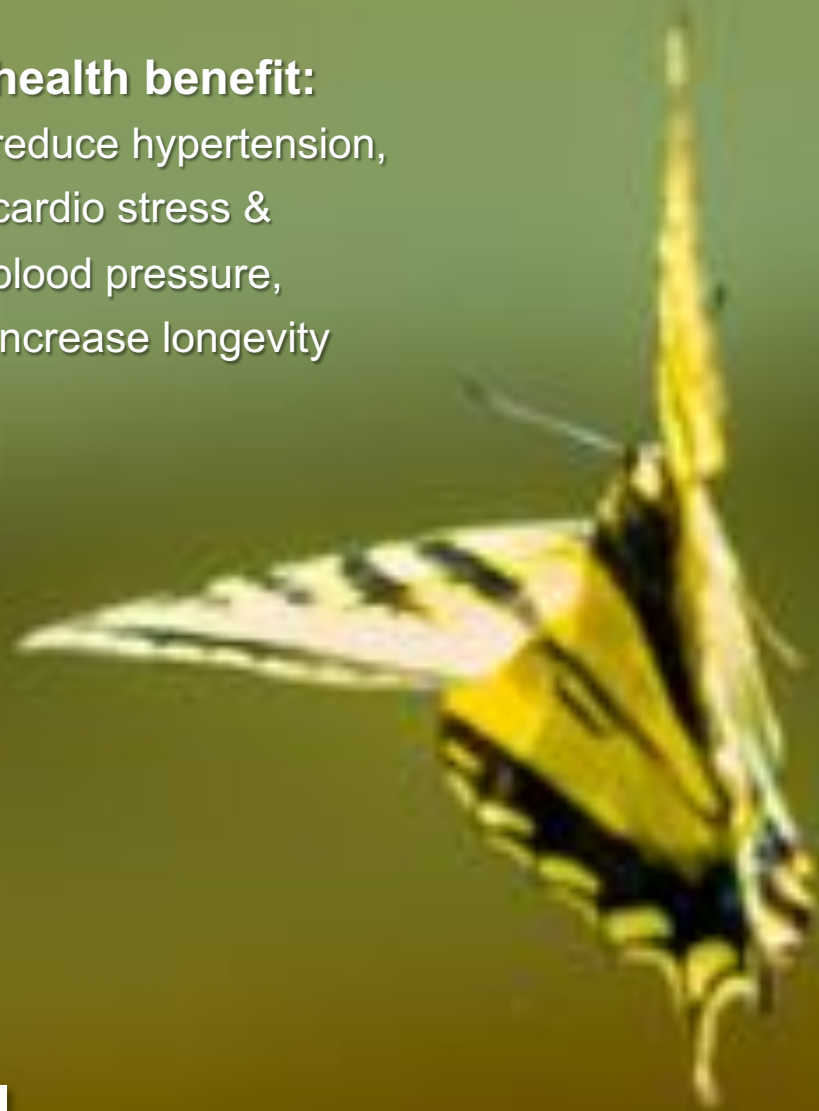
environments that  
radiate abundance



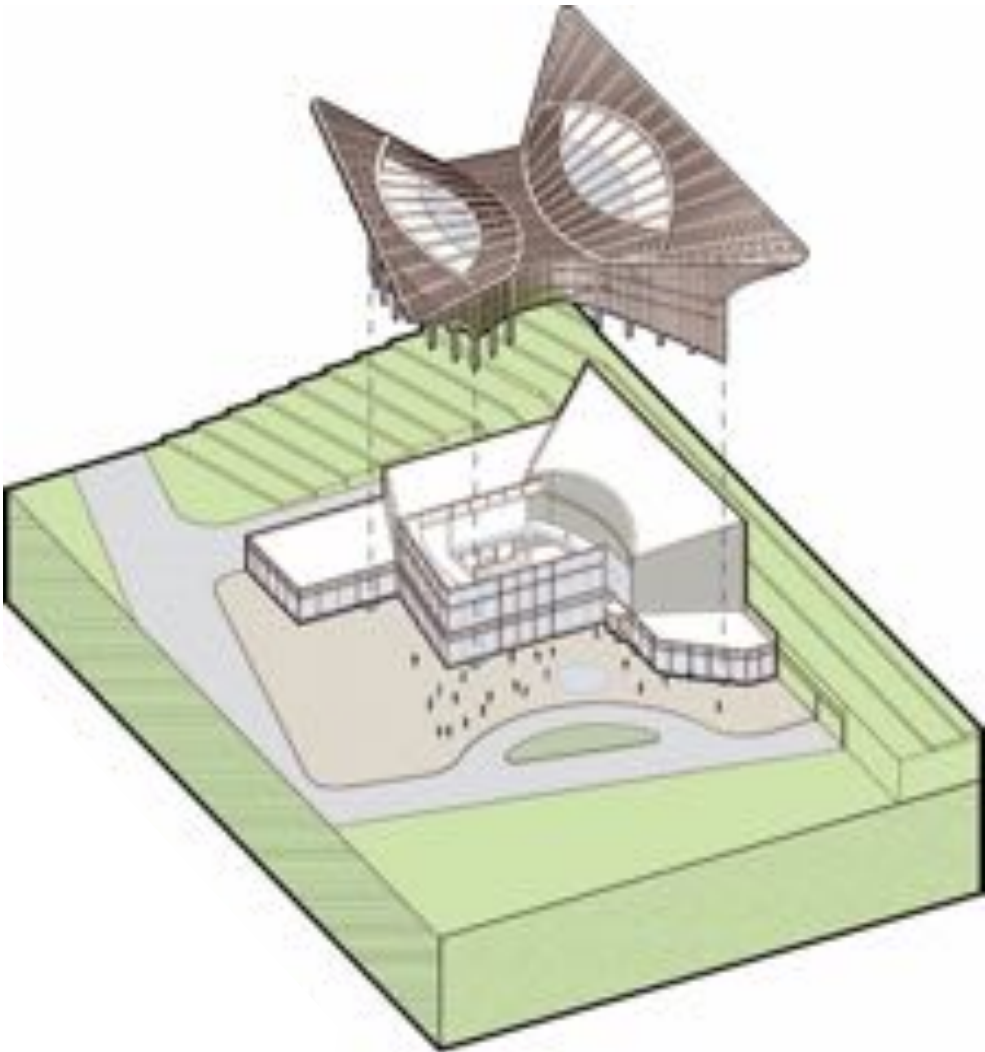
**optimism**

environments that  
radiate abundance

health benefit:  
reduce hypertension,  
cardio stress &  
blood pressure,  
increase longevity



# optimism



Shaare Zedek Cancer Centre, Farrow Partners & RO Architects







Shaare Zedek Cancer Centre, Farrow Partners & RO Architects



Shaare Zedek Cancer Centre, Farrow Partners & RO Architects







Shaare Zedek Cancer Centre, Farrow Partners & RO Architects





# legacy



surroundings that  
communicate a  
“sense of purpose”  
& something bigger

legacy





surroundings that  
communicate a  
“sense of purpose”  
& something bigger

**health benefit:**  
cognitively sparking hope,  
longing & pride; lower blood  
pressure & cardio strength

# legacy







Shaare Zedek Cancer Centre, Farrow Partners & RO Architects



Shaare Zedek Cancer Centre, Farrow Partners & RO Architects



Shaare Zedek Cancer Centre, Farrow Partners & RO Architects



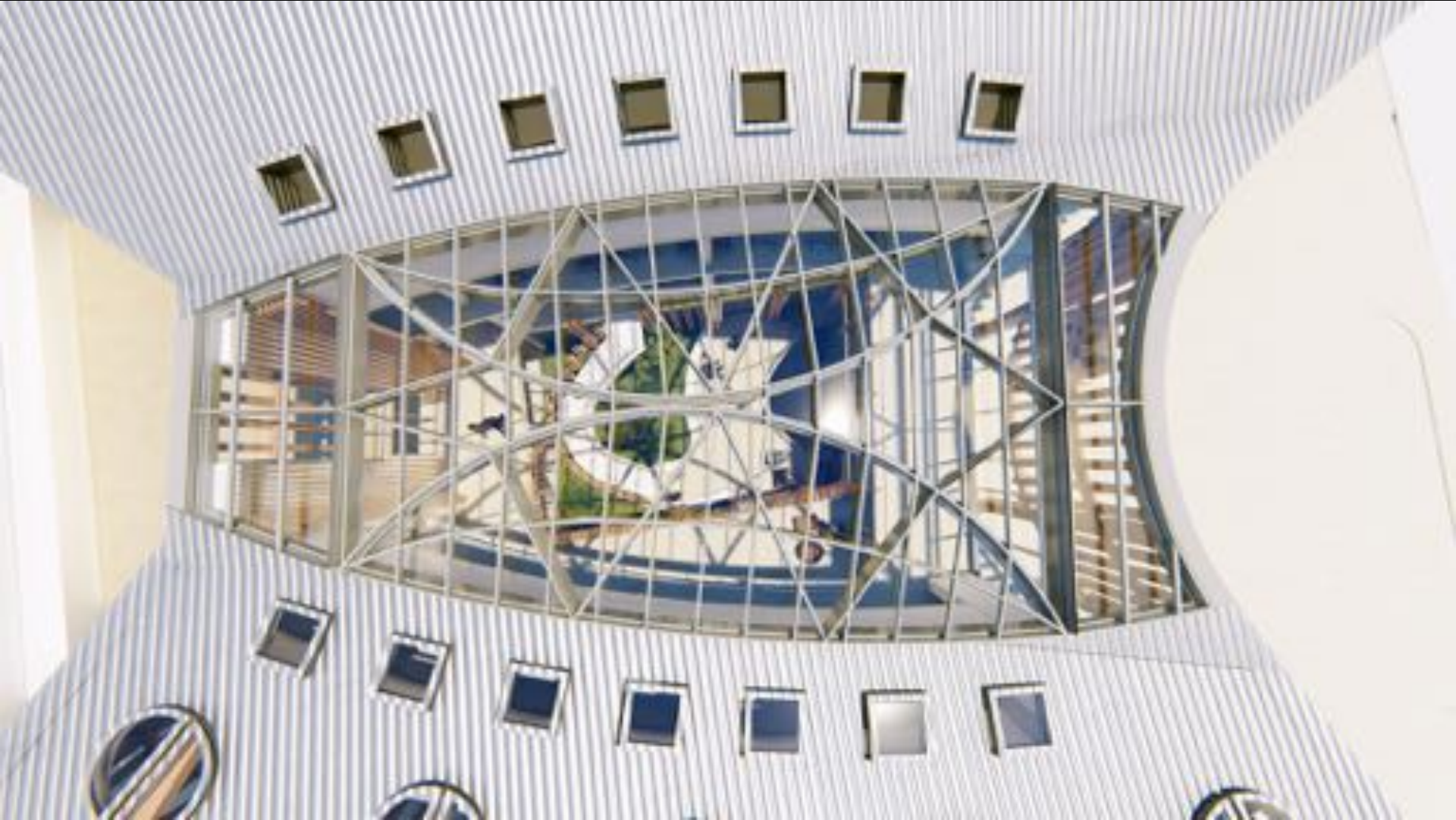


Shaare Zedek Cancer Centre, Farrow Partners & RO Architects









Shaare Zedek Cancer Centre, Farrow Partners & RO Architects



Shaare Zedek Cancer Centre, Farrow Partners & RO Architects

nature

variety

vitality

authenticity

sense of

occurrence

optimism

legacy



**bolster attention, memory,  
learning & the quality of  
social interaction**

**thrive**





[www.farrowpartners.ca](http://www.farrowpartners.ca)  
instagram @ tyefarrow



