

Subject: Architectural Psychology

Topic: Environmental Stressors

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# Environmental Stressors

**Environmental conditions that interfere with optimal human functioning include:**

- Crowding
- Daily hassles & life events
- Noise
- Temperature

# Environmental Risks

Risk perception studies e.g., of:

- Natural disasters
- Diseases
- Pollution
- Food contamination
- Accidents
- Nuclear power
- Terrorism

# Environmental Risks

- We tend to perceive as most risky, environmental variables we “can't” control e.g., predator attacks as opposed to risks we perceive that we can control e.g., driving.

# Environmental Design

- **Assessing & planning:** Describing & predicting human behaviour for artificial designs
- **Architectural psychology**
- **Consumer psychology:** e.g.,  
Shopping Mall Design
- **Permaculture**
- **Wayfinding**

# Natural Environment

1. Preference
2. Evolutionary Psychology
3. Biophilia Hypothesis
4. Nature's Psychological Effects
5. Nature-Deficit Disorder

## Natural Environment

- Preference for natural over built environments (Ulrich, 1986) e.g., leisure and recreation, real estate.
- Positive physical and psychological reactions to exposure to natural environments.
- Mental imagery and sounds of natural environments has +ve psychological effects. (Kaplan).

# Evolutionary Psychology

“Ishi was sure he knew the cause of our discontent. It stemmed from an excessive amount of indoor time...

'It is not a man's nature to be too much indoors.’”





## Evolutionary Psychology

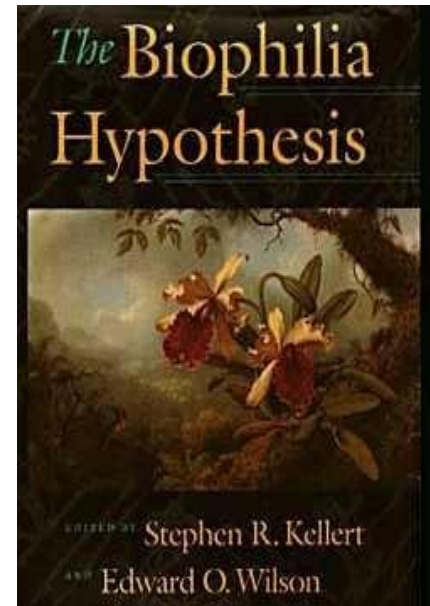
"If today I had a young mind to direct, to start on the journey of life, and I was faced with the duty of choosing between the natural way of my forefathers and that of the... present way of civilization, I would, for its welfare, unhesitatingly set that child's feet in the path of my forefathers. I would raise him to be an Indian!" (Tom Brown)

# Biophilia Hypothesis

Edward Wilson, an etymologist proposed that: *humans have an instinctive affinity with life-like processes i.e., nature, due to our evolutionary history*



"innate  
tendency to  
focus on life and  
lifelike  
processes."  
- Wilson



# Biophilia Hypothesis

## Proposition:

Human beings have a genetic predisposition towards “life-like” or “nature” processes.

Humans evolved as creatures deeply enmeshed with the intricacies of nature, and that we still have this affinity with nature

Examples of “nature’s” imprint on consciousness...

- 90% of children’s stories, cartoons, etc. feature animals as the main characters
- Photos and artworks of nature and natural scenes adorn our homes, work-places, used as screen savers, etc.
- Dwellings with views of nature (e.g.,

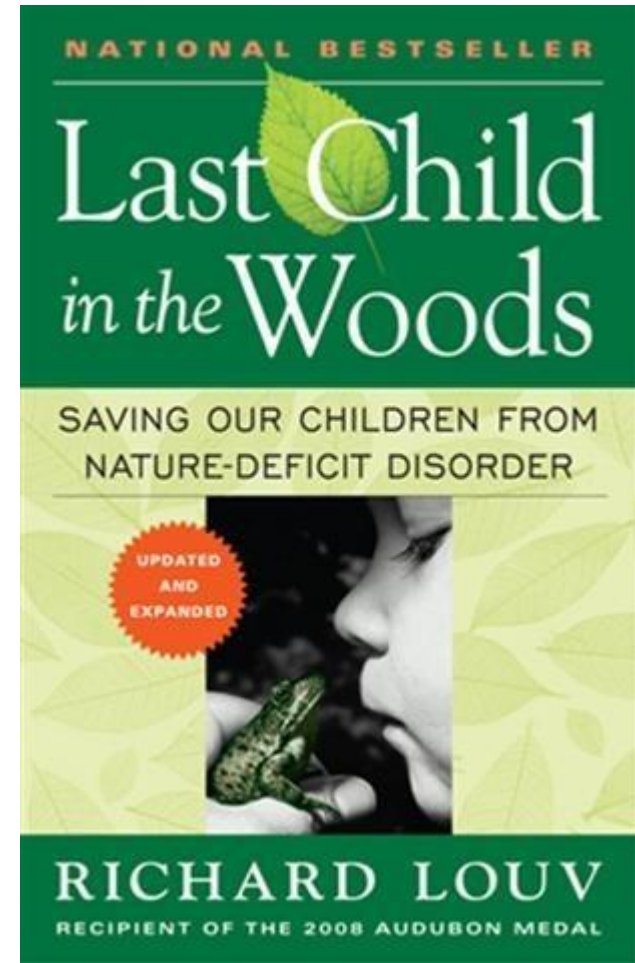
# Nature's Psychological Effects

Research reveals positive, healthy effects of nature-based experiences e.g., effects of

- Animals
- Nature scenes
- Adventure therapy
- Green exercise

# Nature-Deficit Disorder

- A term coined by Richard Louv in his *Last Child in the Woods* (2005)
- Argues that children are spending less time outdoors, resulting in behavioural problems (e.g., ADHD), exacerbated by parental fears, restricted access to nature, and technology



# Green Prescription

Doctors and psychologists are being encouraged to consider “green” experiences (in touch with nature) and “green prescriptions” as part of the physical and psychological health promotion, prevention, and treatment regimens.



# Howard Frumkin

- **Literature review of the positive physical health effects of nature**  
(in American Journal of Preventive Medicine)
- **Biophilia hypothesis as underlying the positive benefits.**
- **Research reveals positive, healthy effects of nature-based experiences** e.g., effects of animals, nature scenes, adventure therapy, etc.



Humans → Environment

"Most psychologists still think that environmental problems are the concern of environmental scientists but environmental problems are caused primarily by human behaviors, feelings and attitudes. We can't solve these problems without psychology's help and we really need psychologists to go work on them."

- Deborah Winter

Humans → Environment

- Environmental Concerns
- Attitudes & Behaviors
- Population ↔ Consumption
- Barriers
- Technology
- Policy
- Sustainability

# Environmental Concerns

- **Proenvironmental attitudes, beliefs and values about the relationship between humans and the natural environment**
- **Considers the environment as valuable in its own right and as worthy of protection, care, and preservation by humans.**

# Environmental Concerns

- Rising since the 1960s
- Gallup & Gallup (1993) surveyed ~1000 people in each of 22 countries. In 20 countries, environmental protection was the top social concern.

# Environmental Concerns

Approx. one quarter of Westerners think environmental concerns are exaggerated ( $N > 1000$  per country).

